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MEMORIAL OF THE CENTENNIAL
OF THE

YALE MEDICAL SCHOOL

1814—1914

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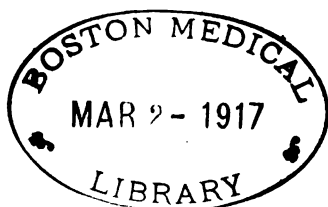
MEMORIAL
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The First Faculty of the Medical Institution of Yale College.



Nathan Smith, 1813-1829

Professor Theory and Practice of Physic, Surgery and Obstetrics.

[Portraits of the following appear on next page in this order]

Eneas Munson, 1813-1826

Professor Materia Medica and Botany

Benjamin Silliman, 1813-1853

Professor Chemistry, Mineralogy and Geology

Jonathan Knight, 1813-1864

**Anatomy and Physiology, 1813-1838
Principles and Practice of Surgery, 1838-1864**

Eli Ives, 1813-1861

**Adjunct Professor Materia Medica and Botany, 1813-1829
Professor Theory and Practice of Medicine, 1829-1852
Emeritus, 1852-1861**



The First Faculty of the Medical Institution of Yale College.

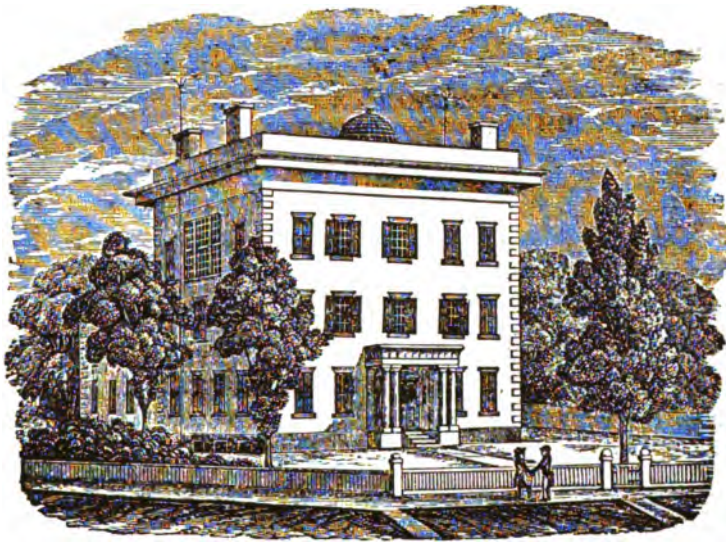


CENTENNIAL
OF THE
YALE MEDICAL SCHOOL

JUNE THE FIFTEENTH

A. D. NINETEEN HUNDRED AND FOURTEEN

AT FOUR O'CLOCK



MEDICAL INSTITUTION OF YALE COLLEGE, 1813

WOOLSEY HALL
NEW HAVEN, CONNECTICUT

HISTORICAL DATES

-
- 1777 Professorship of Medicine at Yale College proposed by a Committee of the Connecticut General Assembly.
- 1792 Charter of Connecticut Medical Society.
- 1810 Sixth Medical School in the United States established by the "Articles of Union" creating "The Medical Institution of Yale College," adopted by the Assembly through amendment of the Act incorporating the Medical Society.
- 1818 Beginning of instruction in the Medical School under Nathan Smith, Professor of the Theory and Practice of Physic, Surgery, and Obstetrics; Eneas Munson, Professor of Materia Medica and Botany; Eli Ives, Adjunct Professor of Materia Medica and Botany; Benjamin Silliman, Professor of Chemistry and Pharmacy; and Jonathan Knight, Professor of Anatomy.
- 1814 Present South Sheffield Hall purchased for the school with the aid of a contribution of twenty thousand dollars from the state, and first Medical class graduated.
- 1826 Act incorporating the "General Hospital Society of Connecticut" (New Haven Hospital), and act legalizing an agreement on the part of the Professors in the Medical School to contribute one-tenth part of their fees for five years towards the fund to establish the hospital.
- 1859 Removal of School to Medical Hall on York street.
- 1879 Stated matriculation examination and three years graded course introduced.
- 1884 Union between the Yale Medical School and the Connecticut Medical Society annulled by mutual agreement.
- 1892 Medical Laboratory erected.
- 1896 Four year course introduced.
- 1901 University Clinic erected.
- 1902 Agreement between University and New Haven Dispensary ratified.
- 1907 Continuous service secured in the Hospital for the Professor of Medicine and the Professor of Surgery in return for the University meeting the expense of a Pathologist. Clinical Laboratory opened.
- 1918 Agreement signed between General Hospital Society of Connecticut and Yale University permitting the University "to nominate, as vacancies occur, suitable persons for the positions of attending physicians, surgeons and specialists in medicine and surgery on the staff of the Hospital" etc., and "to suffer and permit the physicians, surgeons and others elected by the Hospital as aforesaid to use the public wards, laboratories and other buildings of the Hospital, wherever located, for teaching purposes" under conditions approved by the Hospital Directors, and in return for providing a fund of six thousand dollars for certain purposes.

ORDER OF EXERCISES

MUSIC, by NEW HAVEN SYMPHONY ORCHESTRA, conducted by PROFESSOR HORATIO WILLIAM PARKER, MUS.D.

"MERRIE WIVES OF WINDSOR" *Nicolai*

INTRODUCTORY ADDRESS, by PRESIDENT ARTHUR TWINING HADLEY, PH.D., LL.D.

HISTORICAL ADDRESS. "THE EVOLUTION OF MEDICINE IN CONNECTICUT WITH THE FOUNDATION OF THE YALE MEDICAL SCHOOL AS ITS NOTABLE ACHIEVEMENT," by WALTER RALPH STEINER, M.D., of Hartford.

MUSIC, "DAYBREAK" from PEER GYNT SUITE . . . *Eduard Grieg*

ADDRESS. "PRE-MEDICAL STUDIES IN THEIR RELATIONS TO GENERAL AND PROFESSIONAL TRAINING," by PROFESSOR WILLIAM HENRY HOWELL, M.D., LL.D., of Baltimore.

MUSIC, 1. "IN THE HALL OF THE MOUNTAIN KING," from PEER GYNT SUITE *Eduard Grieg*

2. MINUET *Bizet*

BENEDICTION, by EX-PRESIDENT TIMOTHY DWIGHT, D.D., LL.D.

MUSIC, "POMP AND CIRCUMSTANCE" . . . *Sir Edward Elgar*

ADDRESS OF PRESIDENT HADLEY

WE meet to celebrate the one hundredth anniversary of the founding of the Yale Medical School. A department of Medicine is and always has been regarded as an essential element in every well equipped university. The importance of the public service rendered by its graduates and the careful theoretical training necessary to prepare them for such service make it at once a duty and a privilege for a great university to take its part in medical training. And there are certain special circumstances in the history of Yale which give to its Medical School a more than ordinary significance as an integral part of Yale life and organization.

In the first place, the establishment of the Medical School was the first of a series of events which during the nineteenth century changed Yale from a college to a university.

All through the eighteenth century the work of the students at Yale had been scholastic rather than professional. Both in the choice of studies and in the methods of teaching, the curriculum represented an advanced course in a classical academy rather than a training for the subsequent work of after life. The advent of the Medical School involved a recognition of the old Latin maxim, "Non scholæ sed vitæ discimus." Its establishment paved the way for the establishment of special courses in law and theology and engineering and chemistry, and the various other departments of instruction by whose gradual accretion and organization Yale has to-day become a university in the European sense.

In the second place, the establishment of a medical school of high grade a hundred years ago constituted an important part of that work in natural science with which Yale has always been so prominently identified.

Among the many great things which the elder President Dwight accomplished for Yale, perhaps the most striking was the establishment of an active interest in chemistry, mineralogy, and geology, under the leadership of Benjamin Silliman. But the practical applications of chemistry and geology to the problems of industrial life were in these days hardly recognized; and the interest thus created by Professor Silliman would have rested on a purely theoretical and therefore rather precarious basis, had it not been for the establishment of the Yale Medical School a few years later. I doubt if any of us to-day recognize how dependent the scientific courses in the College and the practical courses in the Medical School were upon one another in those

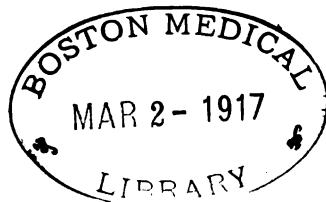
early days or how much each did for the other. But we have an example of this interdependence before our eyes at the present day in the work of Professor Chittenden and his pupils. Every Yale man knows what the study of physiological chemistry and the study of medicine have done for one another. It is a matter of congratulation to us all that the building of the new University laboratories will give to the student of sciences auxiliary to medicine a broader basis of interest and a wider field of development than they have ever had before, and will, I am confident, strengthen correspondingly the whole work of the School.

A third reason why a medical school is of importance to Yale is that its work is so essentially a preparation for public service.

The Collegiate School at Saybrook was founded, to quote the words of the original charter, as a place of training for public employment in church and civil state. Those who wrote these words probably had in mind only preparation for the ministry or the law. And as a matter of fact, no small part of the skilled practitioners of medicine in the eighteenth century were also ministers of the gospel, and treated the healing of the body as an incident to the healing of the soul. But with the advent of the nineteenth century a wider conception of public service and public employment came into play. It was recognized that the physician who was animated by a public purpose was a public servant. In order that this conception might be realized in practice it was needful that the teachings of medicine should be taken up by places like Yale, whose tradition had trained men for service to others rather than for gain to themselves. Thus and thus only could medicine come to its rightful standing as a profession and not a trade. Thus only could the spirit of the oath of Hippocrates be made a part of the tradition of American medicine. I count it as one of the greatest privileges of Yale to have had its share in establishing the position of the medical practitioner as one of public service. The public character of the work done by Yale was attested from the first by the active co-operation of the Connecticut Medical Society, without which the early achievements of the Yale Medical School would have been well nigh impossible. It has been attested in later years by the spirit manifested by the graduates of the Medical School themselves in the various lines of practice or teaching to which they have been called.

This is a commemoration of the past rather than a forecast of the future. I shall reserve for this evening what details I have to suggest regarding the probable future of the School. Let it suffice now to express the belief that in the second century of its existence no less than in the first, the Yale Medical

School will reflect Yale's character as a university, giving scientific preparation for the practical work of life; that its interests will be closely and harmoniously associated with those of other parts of the University, so that every development of scientific interest or scientific discovery in one shall react favorably upon the other; and that it will in the future, even more than in the past, be a place whence physicians and surgeons shall go forth to do public service and to exemplify before the public the ideals of such service, for which Yale wishes to stand.



THE EVOLUTION OF MEDICINE IN CONNECTICUT, WITH
THE FOUNDATION OF THE YALE MEDICAL SCHOOL
AS ITS NOTABLE ACHIEVEMENT.

WALTER R. STEINER, M. D.

HARTFORD, CONNECTICUT.

ON this hundredth anniversary of the Yale Medical School, how I wish I had the pen of a Henry Bronson,¹ a Gurdon W. Russell,² or a Francis Bacon,³ so that I might successfully portray the evolution of Medicine in Connecticut, with the foundation of the Yale Medical School as its notable achievement! But these distinguished graduates are no more, and the honor is mine to do what they could have more successfully performed.

In the early history of New England the outlook for the physician was decidedly discouraging, there being no inducements for emigration to eminent practitioners in the old world, and, to those who would take up the study of medicine here, the absence of lectures in medical schools, as well as of hospitals, presented distinct drawbacks.⁴ Only a favored few, on account of the expense, could embrace the opportunity for foreign study. There was, also, a dearth of drugs, the large territory to cover necessitated what was even then scant justice to the individual patient and the remuneration was at best but

¹ Dr. Henry Bronson was a graduate of the Yale Medical School in 1827 and Professor of Materia Medica and Therapeutics there from 1842-1852 and again from 1853-1860. He wrote an Historical Account of the Origin of the Connecticut Medical Society. Trans. Conn. Med. Soc., 1873, p. 192, Medical History and Biography, N. H. C. Hist. Soc. Papers, New Haven, 1877, II, p. 239, and other valuable papers.

² Dr. Gurdon W. Russell was a graduate of the Yale Medical School in 1837 and for seventy-two years a prominent physician in Hartford. He wrote Sketches of Physicians in Hartford in 1837, Hartford 1890 and Early Medicine and Early Medical Men in Connecticut, Trans. Conn. Med. Soc., 1892, p. 69.

³ Dr. Francis Bacon was a graduate of the Yale Medical School in 1853 and Professor of Surgery there from 1864-1877. He wrote a History of the Connecticut Medical Society, Trans. Conn. Med. Soc., 1892, p. 177, and Some Account of the Medical Profession in New Haven. History of the City of New Haven, New York, 1887, p. 260.

⁴ Before the Revolution "it had been thought indispensably necessary to resort to foreign universities, to complete the system of medical education, and to acquire there the theory and practice of physic, which the want of regular schools and established hospitals in this country, rendered unattainable." Waterhouse, The Rise, Progress and Present State of Medicine, Boston, 1792, p. 27.

small. Giles Firmin, of Ipswich, Massachusetts,¹ had come over from England in 1682, bringing with him high ideals and a good medical education for those times. He had prepared a skeleton and had given anatomical lectures upon it at Cambridge—in fact, he was the first medical lecturer in this country—but the pinch of poverty could not then be remedied by him, so he despairingly wrote: “I am strongly sett upon to studye divinitie; my studies else must be lost, for physick is but a meene help.”² Later he did adopt this course, returned to England and died in the ministry.

Of the three classes of medical practitioners—the priest physician, the regular physician and the empiric or charlatan—Connecticut appears to have possessed them all. The first existed for “ever since the Days of Luke, the Evangelist, Skill in Physick has been frequently professed and practiced by Persons whose more declared Business was the Study of Divinity.”³ We find, consequently, many a village minister following out what Cotton Mather loved to call “the Angelical Conjunction,”⁴ by tending to the cure of body as well as the cure of soul. Jared Eliot of Clinton, Phineas Fisk of Haddam, the Bulkeleyes, father and son, Gershom and John, of Rocky Hill and Colchester, and Timothy Collins of Litchfield form an illustrious quintette of Connecticut’s clerical physicians, who labored long and well.

Although ruthless quackery, unchecked by any wise legislation, was rampant in colonial times, yet the state of medicine in Connecticut seems to be on a higher level than in the other colonies and can probably be explained by the dignity which the distinguished John Winthrop, Jr., the Governor of Connecticut, lent to this science and art.⁵ For famed by his charity, his learning and his administrative abilities, he made medicine his avocation and “wherever he came, still the diseased flocked about him, as if the Healing Angel of Bethesda had appeared in the place.”⁶ His sovereign remedy, Rubila, was in many a household. In some towns its disposition was entrusted to the minister or a deacon, and, following out Wait Winthrop’s instruction, it appears to have been given at the beginning of any illness.⁷ Its

¹ Dean, *A Brief Memoir of Rev. Giles Firmin, One of the Ejected Ministers of 1662*. N. E. Hist. and Gen. Reg., 1866, XX, pp. 47-58. Also III Mass. Hist. Coll., IV, p. 57.

² Hutchinson, *Coll. of Papers*, Boston, 1769, p. 169.

³ Mather, *Magnalia*, Hartford edition of 1858, I, p. 498.

⁴ Mather, *loc. cit.*

⁵ Wadsworth, *Medicine in the Colonies*, 1910, pp. 7-8.

⁶ Mather, *Op. cit.*, p. 159.

⁷ Mass. Hist. Coll., VIII, p. 429.

taste, however, was a slight objection to its administration, for Davenport, the first pastor at Center Church, in New Haven, states that Governor Newman once took Rubila, but "finding himself sundrie times ready to faint away, hath not been willing to take it again, nor his wife that he should, though we persuaded and encouraged him thereunto."¹ Samuel Stone, assistant to Thomas Hooker, Hartford's first pastor, was also prescribed this powder, but unfortunately was not found "inclinable, though he was burthened in his stomach."² It may have been the powder about which Graciana, Governor Leete's daughter, had "grown marvailous awkward and averse from taking in beer,"³ and probably was the remedy which was prescribed for Mrs. Davenport, concerning which her husband, in the depths, wrote to Winthrop: "My wife took but halfe of one of the papers but could not beare the taste of it, and is discouraged from taking any more. I perceive that some speech from yourselfe would best satisfie her, but if God's providence puttes a barr in the way, we are called to submit thereunto."⁴

Before the formation of the Connecticut State Medical Society, there were no qualifications for practice except one's desire to exercise the healing art. Some, with a three months' study, had set themselves up as physicians and the public was at the mercy of the empiric or charlatan. In spite of the low medical standards, a feeling gradually became broadcast that better supervision should exist to prevent the people from being imposed upon. This feeling originated in the medical profession and was first voiced in Norwich, on September the twenty-seventh, 1768, when eleven doctors, realizing that nothing had been done "publicly to distinguish between the honest and ingenious physician and the quack or empirical pretender," memorialized the legislature with the request that physicians in each county of the colony might have the liberty to meet quarterly and to choose annually a committee of three approved physicians to examine candidates for the practice of physick, and to approve by certificates those found qualified. Those without such certificates, who were not already in practice, were not to be allowed to collect their fees by law.⁵ This pioneer attempt at medical organization in the United

¹ III Mass. Hist. Coll. X, p. 48.

² III Mass. Hist. Coll. X, p. 48.

³ IV Mass. Hist. Coll. VII, p. 548.

⁴ IV Mass. Hist. Coll. VII, p. 581.

⁵ Sumner, *The Early Physicians of Connecticut*, Trans. Conn. Med. Soc., 1851, pp. 50-51.

See also Bacon, *History of the Connecticut Medical Society*, Trans. Conn. Med. Soc., 1892, pp. 183-186, and La Pierre, *The Conception of Our State Society*, Trans. Conn. Med. Soc., 1898, pp. 94-108. The Litchfield County Medical Association was organized in 1764. The

States, unfortunately, met defeat in the lower house of the legislature, and it was only granted to three of the petitioners to see their desires gratified twenty-nine years later.

The advantages of an organization of a medical society were clearly shown during the Revolution when one was formed in the army which had tended to improve the state of medical knowledge.¹ On the tenth of December, 1788, Leverett Hubbard, Eneas Munson, Samuel Nesbit, Levi Ives and Samuel Darling, all of New Haven, requested the physicians and surgeons "to meet at the Coffee House in New Haven on the first of January then ensuing, at two o'clock P. M. for the purpose of forming a county society and combining with other similar bodies to obtain from the legislature an act of incorporation the more effectually to regulate the practice of physic."² It was, consequently, a purely voluntary and provisional organization which was dissolved when its purpose had been attained. To accomplish it, however, required eight years of struggle, during which "the eastern counties appear to have become very remiss and fallen into a lethargy,"³ yet the New Haven County Association persevered and strove by their committee to open a correspondence with other medical societies in this country and Europe, and to send them selected papers from their files. In January, 1788, it was voted that a collection of the most interesting cases communicated to the society be made, and that they be published at the society's expense. A publishing committee of five was, accordingly, appointed and in the summer of that year a pamphlet appeared, containing eighty-six pages, with the title: *Cases and Observations; by the Medical Society of New Haven County, in the State of Connecticut*. It was the first publication of any medical society in this country and was a very praise-worthy production, containing twenty-six papers, contributed by the society's most distinguished members. Five hundred copies were printed, and its complimentary notices by Dr. John Warren of Boston, Bishop Seabury of Connecticut (for he had been trained as a physi-

county then was rather inaccessible so the association could not of necessity play a very important part in the foundation of the State Medical Society. Its first existing record book dates from 1808.

¹ *Cases and Observations; by the Medical Society of New Haven County, in the State of Connecticut*, New Haven, 1788, p. iii.

² Bronson, *Medical History and Biography*, N. H. C. Hist. Soc. Papers, New Haven, 1877, II, pp. 289-288, and Eliot, *The Origin of the New Haven County Medical Association*, New Haven, 1902, pp. 8-16.

³ Bronson, *Historical Account of the Origin of the Connecticut Medical Society*, Trans. Conn. Med. Soc., 1873, p. 198.

cian) and Dr. John Morgan of Philadelphia, with others from England and France,¹ doubtless spurred the members to further efforts, which were successful in May, 1792, when the Connecticut State Medical Society was finally organized by a charter free from the objections of the previously rejected bill of 1787.² It was accomplished, however, only in the teeth of the most intense opposition, which was demonstrated in Yale College in 1788, when it caused the seniors to debate the question "Whether it be safe to grant the proposed charter for the medical societies in Connecticut," and on the sixth day of January, in the year following, they took up the subject again, in the form "Whether the institution of medical societies be useful."³ The keen public interest in this appears to have been developed from the fear lest chartering a medical society might create a private monopoly.

After the charter was granted, as the years passed on, public opposition ceased for the effect of the medical society upon the medical profession was magical. Thomas Miner, of Middletown, in a Presidential address before the society, in 1837, has shown to what a low ebb the majority of the profession had reached in 1792.⁴ Though capable physicians were rare, yet trustworthy surgeons were scarcer, and a competent obstetrician was almost unknown. He says, "there was not probably a good practitioner to a county." By this professional union, however, quackery and mystery were largely banished from the profession, and the need of better facilities, in Connecticut, for medical education soon became painfully apparent. In 1800, the legislature disowned all pretenders as physicians by withholding from them the legal power of collecting their professional debts, unless they had been legally examined and approved.⁵

Before the establishment of the Yale Medical School, the opportunities for the education of Connecticut physicians were for the most part inconsiderable.⁶ Some, like Daniel Lathrop (Y. C. 1733) of Norwich,⁷ Daniel Bon-tecou (Y. C. 1757)⁸ of New Haven, or Elihu Tudor (Y. C. 1750) of East

¹ Bronson, *Medical History and Biography*, N. H. C. Hist. Soc. Papers, New Haven, 1877, II, p. 18.

² Bronson, *Historical Account of the Origin of the Connecticut Medical Society*, *Trans. Conn. Med. Soc.*, 1873, p. 201.

³ *The Literary Diary of Ezra Stiles*, edited by Franklin Bowditch Dexter, New York, 1901, III, pp. 324 and 338.

⁴ *Trans. Conn. Med. Soc.*, 1837, pp. 8-12.

⁵ Unfortunately this law was repealed by the legislature in June, 1842.

⁶ Knight, *A Lecture Introductory to the Course of Instruction in the Medical Institution in Yale College*, New Haven, 1838, p. 7.

⁷ Dexter, *Yale Biographies and Annals*, N. Y., I, pp. 483-484.

⁸ Dexter, *Op. cit.*, II, p. 451.

Windsor,¹ were able to go abroad to "walk the hospitals," although they did not stay long enough for a medical degree. Their number, unfortunately, was confined to a favored few. Others like William Tully (Y. C. 1806) of Saybrook,² or Timothy J. Gridley (Y. C. 1808, of Middletown Upper Houses or Cromwell³ went to Dartmouth to place themselves under the able instruction of Nathan Smith, while still others, like Jonathan Knight (Y. C. 1808) of Norwalk,⁴ or Elisha North of Goshen⁵ betook themselves to the medical school of the University of Pennsylvania, or like Thomas A. Graham (Y. C. 1768) of West Suffield to King's College Medical School in New York City.⁶ But the largest percentage of them, compelled by their scant means to remain at home, bound themselves, by an apprenticeship to a neighboring physician, for a variable period. When they felt competent to practise, they then were accustomed to receive a certificate, vouching for their good character and satisfactory attainments. Some of the earliest physicians were licensed to practise by the General Assembly, and by virtue of this power were not required to pay taxes and were excused from military and other personal duties until 1740, when this law was repealed.⁷ Others, without any license or authority, started to practise upon their own volition and many in this group were incompetents, quacks or pretenders.

Of the early teachers, it is sufficient to name Jared Eliot of Clinton, who has been considered the father of medical practice in Connecticut,⁸ Benjamin Gale of Killingworth, his son-in-law,⁹ John Barker of Franklin,¹⁰ Jared Potter of Wallingford,¹¹ Lemuel Hopkins,¹² and Mason F. Cogswell of Hartford,¹³

¹ Dexter, *Op. cit.*, II, pp. 243-245.

² Dexter, *Op. cit.*, VI, pp. 68-73.

³ Dexter, *Op. cit.*, VI, pp. 198-194.

⁴ Dexter, *Op. cit.*, VI, pp. 218-216.

⁵ Steiner, Dr. Elisha North, One of Connecticut's Most Eminent Medical Practitioners, *Johns Hopkins Hosp. Bull.*, 1908, XIX, pp. 301-307.

⁶ Dexter, *Op. cit.*, III, pp. 278-279.

⁷ Sumner, *Op. cit.*, p. 87.

⁸ Dexter, *Op. cit.*, I, pp. 52-56.

⁹ Dexter, *Op. cit.*, I, pp. 477-480.

¹⁰ Woodward, *Trans. Conn. Med. Soc.*, 1859, p. 81, and 1862, pp. 174-175.

¹¹ Dexter, *Op. cit.*, II, pp. 668-670.

¹² Steiner, Dr. Lemuel Hopkins, One of the Celebrated Hartford Wits, and a Forgotten Distinguished American Student of Tuberculosis. *Johns Hopkins Hosp. Bull.*, 1900, XXI, pp. 16-27.

¹³ Dexter, *Op. cit.*, IV, pp. 141-143.

John Osborn of Middletown,¹ Elisha Tracy of Norwich,² and Thomas Hubbard of Pomfret (later Professor of Surgery in the Yale Medical School).³ Some of these had so many pupils that they conducted a miniature medical school, which, in a few instances, had a great reputation in those days. In one of Lemuel Hopkins' letters to Joel Barlow he writes: "I still keep up my medical school and have now five pupils—all promising young men—with me,"⁴ while on another occasion he states: "I still keep a roomful of pupils."⁵ Earlier, in 1785, when there were but two medical schools in this country, we find Dr. Philip Turner and Dr. Philemon Tracy of Norwich issued a prospectus for the delivery of a series of lectures to students on Anatomy, Physic, Surgery, etc. As an inducement they offered "the free use of a complete library of ancient and modern authors, together with the advantage of being present at capital operations, dissections, etc." They, also, state that every attention will be paid by them "to render their lectures both useful and pleasing, their constant endeavors will be to facilitate the instruction, direct with propriety the judgment, correct the errors and increase the knowledge of the pupils in their study."⁶ In Pomfret stories are still extant of the fast riding over the country of Dr. Thomas Hubbard, and his pupils, who were discourteously called "his hounds."⁷

The elder Dwight is generally credited with the distinction of first suggesting a medical school to be established in connection with Yale, but the idea really originated in the mind of his predecessor, Dr. Ezra Stiles. On December 3, 1777, about six months before he became President, he drafted a plan of a university, particularly describing the Law and Medical Lectures. This was done at the desire of the Yale Corporation, as they wished to lay it before a committee of the General Assembly of Connecticut, which was appointed to consider the expediency of founding these two professorships, as well as other matters. Fortunately a copy of this plan is still preserved among Dr. Stiles' papers,⁸ and from it we learn that the author thinks it "desirable in order to cement a seat of learning with the public that some at least of the principal

¹ Mathewson, *Trans. Conn. Med. Soc.*, 1877, p. 141, and Hazen, *Trans. Conn. Med. Soc.*, 1892, p. 549.

² Dexter, *Op. cit.*, I, pp. 609-610.

³ Kingsley, *Yale College*, New York, 1879, II, p. 76.

⁴ Todd, *Life and Letters of Joel Barlow*, New York, 1886, p. 112.

⁵ MS. letter, *Conn. Hist. Soc.*

⁶ Woodward, *Trans. Conn. Med. Soc.*, 1862, p. 169.

⁷ Kingsley, *loc. cit.*

⁸ Stiles' MS., Yale University Library.

Foundations should be instituted by the State, and suggests that the Professorships of Law and Physic are of exceeding utility and benefit." Then he speaks of 200 physicians living in Connecticut, and adds that "to circulate and increase medical knowledge must be an object worthy the attention of every well regulated state." He would divide the medical lectures into three series, assigning to the first "the anatomy of the human body, muscular motion, the vascular system, the circulation of the blood, osteology, and in general whatever tends to give a complete idea of the animal frame the subject of diseases and health." These lectures, he thinks, might consist of extemporaneous descriptions on a skeleton and on the arterial and venous systems in wax, with occasional dissections and explanations of the plates and drawings in Cowper's *Anatomy* and Cheselden's *Osteography*.

The second series would consist of lectures on *materia medica*, and for this he proposes a room furnished with drugs as in an Apothecary shop, being a good collection of simples and the capital efficacious medicines with some of the officinal preparations. These should not be exhibited in written lectures, after the manner of Cullen, but should be arranged by the professor so that he might go round the room and give extemporaneous lectures or descriptions of each class, until he has finished the whole arrangement and led the pupils through the whole *materia medica*. Connected with these lectures, he would have some on chemistry, so that the physician might know about compounding or preparing some important medicines and recommends Boerhaave's or Newman's Lectures for the preparation of these talks.

The last series should consist of written lectures on the nature of diseases and the art of medicine and surgery. He advises the consultation, for this purpose, of the writings of Hippocrates, Boerhaave, Van Swieten, Sydenham and Mead. These also should be referred to the students for their private reading and study. After taking this series the student if found qualified could take the Degree of Bachelor in Physic. Then leaving college, after a year's course of clinical Lectures and the *Praxis medendi* with some physician in full and large practice, the student may be prepared to receive the degree of doctor of physic. The public then, he adds, would experience the benefit when the main body of Physicians in a State and thus formed for usefulness and honor. Unfortunately the committee was not like minded, so the matter slumbered until the elder Dwight re-opened it soon after he became President in 1795.

In 1802 Benjamin Silliman was appointed to the chair of Chemistry and Natural History, at Yale College,¹ and we learn in his biography that he then

¹ "Already in 1798 President Dwight, in the fullness of his learning and the wide reach

expected "from the first to be ultimately connected with a medical school," at the same institution.¹ For this reason, before taking up the duties of his professorship, he attended, in Philadelphia and Edinburgh, lectures upon anatomy, materia medica, botany and the theory and practice of medicine, in addition to those on chemistry and natural history, his coming specialties. Four years later, at a meeting of the Yale Corporation, the Reverend Dr. Nathan Strong of Hartford introduced a resolution which called for the appointment of a committee to inquire into the expediency of establishing a medical professorship.² If this committee found it expedient and practicable they were then to devise the means of such establishment and a system of regulations which they judged adapted to the subject. The resolution was promptly passed and the Prudential Committee with Dr. Nathan Strong and Professor Benjamin Silliman were appointed as a special committee.³ It was intended to be, as Silliman subsequently states,⁴ the leading step towards a medical school for the establishing of which ample authority was clearly expressed in Yale's Charter of 1745.⁵ The Connecticut Medical Society had, however, been subsequently granted an unusual charter which gave the society the power not only to examine and license physicians, but also to confer degrees upon them. The society, acting within this power, had recently made several regulations concerning medical education,⁶ so the committee from the college recognized the importance of conferring with the society about the establishment of a medical institution and addressed a letter to it, upon this subject, which was

of his intelligence, had perceived the importance of the science of Chemistry, and through his influence a vote of the Corporation was passed to the effect 'that a Professorship of Chemistry and Natural History be instituted in this College as soon as the funds shall be sufficiently productive to support it.' Kingsley, Yale College, New York, 1879, I, p. 211.

¹ Fisher, Life of Benjamin Silliman, New York, 1866, I, p. 161.

² MS. Records, Yale Corporation.

³ The Presidential Committee at that time was composed of Hon. John Treadwell of Farmington, Lieutenant Governor of the State, Rev. Dr. James Dana of New Haven and Rev. David Ely of untington. MS. Records, Yale Corporation.

⁴ Fisher, Life of Benjamin Silliman, New York, 1866, I, p. 260.

⁵ Clap, The Annals or History of Yale College, New Haven, 1766, pp. 50 and 51.

⁶ October 1799 "Voted, That Doctors Æneas Munson, Nathaniel Dwight, James Potter, Simon Walcott, Jessie Carrington, William B. Hall, Thaddeus Clark and Jeremiah West be a Committee to take into consideration and digest some regular system of education to be pursued by Candidates for the practice of Physic and Surgery in this State; and report to next Convention." A Revision of the By-Laws of the Connecticut Medical Society till October, 1802, Middletown, 1802, p. 29.

May 1800 "Voted, To accept the report of the Committee appointed last October, to

read at an adjourned convention of the Medical Society, at the house of Amos Ransom, in Hartford, on May 20th. 1807.¹

This led to the appointment of a committee of conference and consultation on the part of both, which had frequent meetings under President Dwight's chairmanship, in Professor Silliman's rooms, in the Lyceum.² In the fall of that year a committee of five from the Medical Society reported in favor of a union with the college, in establishing a medical institution.³ The report was accepted by the Society, and eight were then appointed by it, to form with a committee from Yale a constitution to answer the purposes proposed in the contemplated union.⁴ In May, 1808, the report of this committee was read, amended and adopted by the Society, and finally was sent to the clerks of the eight component county medical associations for their local societies' consideration.⁵ Five months later, a committee of three was chosen to confer with a committee from the Corporation of Yale College upon the articles of union as amended.⁶ Their report, when amended by the medical convention, was also adopted but, through some neglect or inadvertence, it was not laid before the Corporation until September, 1810.⁷ After an alteration in

point out a regular system of education to be pursued by Candidates for the practice of Physic and Surgery, which is as follows, viz. That no Candidate for the practice of Physic or Surgery in this State, shall be admitted to examination, until he shall have attained the age of twenty-one years, is of good reputation, and shall have had a Collegiate Education, and shall have studied at least two years with some respectable Physician or Surgeon; or if he has not had such preparatory education, shall have studied at least three years with such Practitioner; and shall not be licensed to practice, unless found qualified as follows viz.

"A General knowledge of natural Philosophy, Chemistry and Botany, and a thorough knowledge of Materia Medica, Pharmacy, Anatomy and Physiology, Theory and Practice of Physic and Surgery." Ibid. p. 21.

¹ Trans. Conn. Med. Soc., 1807, pp. 64-65.

² Fisher, *Life of Silliman*, New York, 1866, I, p. 260. The committee from the Medical Society was composed of Drs. John R. Watrous, Mason F. Cogswell, John Barker, Eli Ives and Joseph Foot. Trans. Conn. Med. Soc., 1807, loc. cit.

³ This committee was composed of Drs. John Barker, Eli Ives, Thomas Goodsell, Joseph Foot and Timothy Hall. Trans. Conn. Med. Soc., 1807, p. 69.

⁴ The enlarged committee was composed of Drs. Timothy Hall, John Barker, John R. Watrous, William Shelton, Siah Fuller, Nathaniel Perry, Smith Clark and John S. Peters. Trans. Conn. Med. Soc., 1807, p. 70.

⁵ Trans. Conn. Med. Soc., 1808, p. 71.

⁶ This committee was composed of Drs. Eli Ives, Samuel Woodward and John Bester. Trans. Conn. Med. Soc., 1808, p. 73.

⁷ A special committee, composed of Drs. John Barker and Thomas Hubbard, was appointed by the State Society to wait on his Honor, the Lieut. Governor, and ascertain if anything and

the articles as amended was proposed by the Corporation, they were adopted by the Medical Society, and a committee of three were appointed to confer with the Corporation's committee about the means of accomplishing this union and of bringing an act of incorporation before the legislature.¹ In October, 1810, this act was passed by the united efforts of the two committees, and is the basis of the present charter of the Medical School.² It has subsequently been amended in 1821,³ re-enacted in 1825⁴ with amendments in 1826,⁵ 1829⁶ and 1832,⁷ again re-enacted in 1834,⁸ with amendments in 1856⁹ and

what was done by the Corporation respecting the Articles of Union with the Medical Institution in Yale College, transmitted by the Secretary. This committee reported that through some neglect or inadvertence they were not laid before the Corporation. Then it was voted that Drs. Barker and Goodsell be a committee to wait on Mr. Silliman and request him to lay before the Corporation in September, 1810, the Articles of Union, as amended by the Convention. *Trans. Conn. Med. Soc.*, 1809, p. 77.

¹ The committee from the medical society to consider the method to be pursued to accomplish this union was composed of Drs. John R. Watrous, Mason F. Cogswell and Eli Ives. *Trans. Conn. Med. Soc.*, 1810, p. 81. The committee from the college for this purpose was composed of President Dwight and Benjamin Silliman. *MS. Records, Yale Corporation.*

² *Trans. Conn. Med. Soc.*, 1811, pp. 86-89.

³ *Public Acts of Conn.*, 1822-1835, p. 20. This amendment refers to the proper signing of licenses and diplomas, and makes those licenses and diplomas legal, which have been heretofore otherwise countersigned.

⁴ *Trans. Conn. Med. Soc.* 1825, pp. 7-12.

⁵ *Trans. Conn. Med. Soc.*, 1826, p. 9. By this amendment the agreement of the professors was legalized, to pay each, for five years, the annual sum of one-tenth their fees for for a hospital at New Haven. This sum was not to exceed one hundred dollars a year and if the amount was less than one hundred dollars, the professors agreed to bring it up to that figure. By this amendment the old rule regarding gratuitous students was abolished.

⁶ *Trans. Conn. Med. Soc.*, 1829, pp. 10-11. This amendment increased the professors to six, established as a preliminary requirement "a competent knowledge of the Latin language and some acquaintance with the principles of Natural Philosophy," in addition to a good English Education. The course of study at the school was lengthened to three years for a college graduate and four for others. The attendance on only one course of lectures was required for a license but two were necessary for a degree.

⁷ *Trans. Conn. Med. Soc.*, 1832, p. 11. This amendment shortened the course of study for college graduates and non-graduates to two and three years respectively. This was done as the other colleges did not adopt the recommendations of the Northampton Convention.

⁸ *Trans. Conn. State Med. Soc.*, 1834, pp. 14-16. This was re-enacted to avoid the confusing condition existing from the last three amendatory acts. The only change was that a graduating dissertation was required of every student.

⁹ *Trans. Conn. Med. Soc.*, 1856, p. 34. By this amendment no person should be recommended to a gratuitous course of lectures unless he had attended one course of lectures.

1866,¹ and finally re-enacted in its present form in 1879.² By this last enactment, the mutual agreement between Yale College and the Connecticut Medical Society could be voluntarily dissolved by mutual consent, and, in May, 1884, the dissolution was accomplished after an harmonious union of nearly three-quarters of a century.³

The original act speaks of the President and Fellows of the Medical Society uniting with the President and the Fellows of Yale College to form a medical seminary to be styled, The Medical Institution of Yale College.

The institution was to consist of four professorships, viz: (1) of chemistry and pharmacy; (2) of the theory and practice of medicine; (3) of anatomy, surgery and midwifery; (4) of materia medica and botany. They were to be appointed by the Corporation of Yale College from nominations made by a joint committee of an equal number of persons appointed by the Medical Society and the Corporation of Yale College. A cabinet of anatomical preparations was to be provided for, as well as a collection of specimens in the materia medica, and a Botanical Garden was to be established as soon as funds were to be available for that purpose. The medical student was to attend to the study of medicine for two years with "some medical or chirurgical professor or practitioner of respectable standing," if he is a college graduate, or three years if he be not, and one course of lectures was required for admission to an examination for license. "A meritorious person" from each county in the state was annually to be given the privilege of attending the lectures gratis.

¹ Trans. Conn. Med. Soc., 1866, Appendix G., pp. 106-107. The restriction upon the number of professors was removed, provided it was more than four, the price of tickets for each branch was not to exceed \$15.00, a graduation fee of \$25.00 was required and two examinations (one at close of lectures and one during commencement) were now enforced.

² Trans. Conn. State Med. Soc., 1883, pp. 202-203. The professors were now not limited, many matters were omitted from the act, being left to the college for their determination, and the union between the college and Medical Society was so fixed that it might be annulled by mutual consent, without further legislative action.

³ Trans. Conn. State Med. Soc., 1884, pp. 10-11. Knight speaks thus of this union (A Lecture Introductory to the Course of Lectures in the Medical Institution of Yale College, New Haven, 1853, p. 13). "The result of this arrangement has been eminently happy; all unpleasant feeling was at once and forever allayed; the members of the Society became interested in the school; we have at all times had the benefit of their counsel and support, and it gives me pleasure to state that no instance of disagreement has ever arisen among the members of the board or between the School and State Society; on the contrary, each has regarded the other as a fellow laborer in the endeavor to promote and advance the interest of medical science." It is interesting to note that Nathan Smith in 1808 "thought Yale would do better without the assistance of the Medical Society." Tully, MS. Diary, 1808, Yale University.

These individuals were to be recommended by the County Societies or, in case of their failure to do so, by the Medical Convention of the State. The tuition was to be \$50.00 a year. The committee of examination was to consist of the medical professors and an equal number of the members of the Medical Society, appointed by the Medical Convention, and the President of the Medical Society was to be ex-officio president of the examining committee, with the privilege of a vote at all times and a casting vote in case of a tie. If the President be absent, one pro tempore could be appointed by the Medical Society's members of the examining committee. This committee had the power of examining for a license to practise physic and surgery, which license must be signed by the President of the Medical Society, and countersigned by the committee or a majority of the same. The emoluments from the license were to be as heretofore and were to accrue to the Medical Society. For the degree of M.D. the attendance on two courses of lectures was to be required and for this degree four dollars was to be paid to the President of the college, three to each of the examiners present and ten to the treasury of the Medical Society. The honorary degrees were to be conferred by the President of the college on those recommended by the Medical Society. The examinations were to be once yearly, and held at the close of the course of lectures. If the candidates were ill, they might be examined at another time. The medical students, who had attended two courses of lectures, were able to attend future courses gratis, and all those licensed were to be members of the State Medical Society.¹

On Nov. 20, 1810, Timothy L. Gridley (Y. C. 1808) wrote an interesting letter to his classmate, Jonathan Knight, then a tutor at Yale College.² Gridley was studying medicine at that period in Hanover, under Dr. Nathan Smith and desired "to obtain information respecting the establishment of a medical school in connection with Yale College." He had heard that "the

¹ These articles show the efforts of the Corporation to conciliate the jealousy of the medical society by causing the vacancies in the professorships of the institution to be filled by them, on the nomination of a committee, composed of an equal number of professors from the faculty and members of the society. Again, in the appointment of the examining committee this is seen, for it was composed of four from the faculty and four from the medical society, the fifth member being the society's President, who presided at the meetings of the committee and had a casting vote in case of a tie. The medical society also had the right to appoint yearly, through its various, component county associations, two deserving indigent students from each county, who were to receive their lecture tickets gratis.

² MS. letter, Yale University Library. Gridley was born at Cromwell. He received the degree of M.D. from Dartmouth in 1812 and practised medicine at Amherst until his death on March 10, or 11, 1852 (Dexter, *Yale Biographies and Annals*, VI, pp. 198-194).

appointment of professors was the only obstacle to the commencement of medical lectures" and states that he had told Dr. Smith his desire to see his teacher one of the professors there. To this Dr. Smith had replied that if there was a vacancy, and the Faculty of Yale College should request him to fill it, he would accept without the least hesitation. The intolerable burden he had sustained for a number of years past, which he felt unable to endure longer, was one of his reasons for leaving, and we know that he had occupied there what Oliver Wendell Holmes would call not a chair but a settee, lecturing upon chemistry, anatomy, surgery and the theory and practice of physic, in addition to carrying on an extensive practice. Gridley then proceeded to speak of Smith's ability, "first as an original and practical lecturer on surgery," and added, "he has made many and important improvements in operative surgery, discovering the origin as well as cure of some diseases, such as necrosis of the bone." In short, Gridley rated him as the equal if not superior to any surgeon in the United States. Also, "he is a man of general information, of an easy familiar but dignified deportment, communicative, agreeable in conversation, of equable temper and of charitable disposition. In fact, wherever he is known he is admired and beloved." Gridley thought the 60 students in Hanover would largely follow him to New Haven, and imagined the opportunity of attending Mr. Silliman's lectures would collect students from all parts of New England.

In 1811 the Lieutenant Governor, Professor Silliman and Dr. Nathan Strong were appointed a committee to act with the medical convention in establishing the chartered medical school.¹ Subsequently, in the following year, Dr. Mason F. Cogswell of Hartford was chosen Professor of Surgery and Anatomy and Dr. Jonathan Knight, Assistant Professor of the same subjects.² Many with Gridley then believed Dr. Nathan Smith was the man for the first appointment, but "the Corporation and President never countenanced the idea because they believed him an infidel and could not reconcile it with their duty to appoint any man of this description to a station in College whatever might be his talents, reputation and learning." Fortunately, Dr. Smith's sentiments shortly thereafter underwent an entire alteration, and he "fully renounced his infidelity in repeated conversations with intimate friends and to his class, to whom he spoke in such terms of his past and present views as drew tears from both speaker and hearers." Dr. Cogswell, who had ever been loathe to accept the professorship, believed with President Dwight that the appointment

¹ MS. Records, Yale Corporation.

² MS. Records, Yale Corporation.

ought to be reconsidered, to which view both Dr. Ives and Professor Silliman concurred. Consequently Dr. Cogswell opened a correspondence with Dr. Smith upon this subject, and learned from it that Smith would be happy to fill any place in the institution for which he might be thought qualified. He also stated that he considered "New Haven as a place more favorably situated for a medical school than any other in New England."¹ The appointee to the other position, Dr. Jonathan Knight, had been encouraged to give up his tutorship at Yale, in 1811, by Professor Silliman and go to the University of Pennsylvania for medical study. In the year following Silliman wrote him, unofficially and as a friend, "that there was an increasing probability of a certain arrangement taking place, and speaks of the Corporation appropriating \$200 for expenses for anatomical preparations to be procured by him."² Three weeks later, Silliman writes that Knight's chance for the appointment is better than that of any one else³ and suggests that he buy three skeletons for the anatomical department. In March of that year, the school was organized by the appointment of the following professors, although it were not made public until commencement. Nathan Smith, Professor of the Theory and Practice of Physic, Surgery and Obstetrics; Aeneas Munson, Professor of Materia Medica and Botany; Eli Ives, Adjunct Professor of Materia Medica and Botany; Benjamin Silliman, Professor of Chemistry, Mineralogy and Geology; and Jonathan Knight, Professor of Anatomy and Physiology.⁴

In the fall of 1812 thirty-seven students were assembled for instruction, on the opening of the school,⁵ and in 1814 the first class of three members was graduated with the degree of doctor of medicine.⁶ A building, which is now the main building of the Sheffield Scientific School was rented from its owner, James Hillhouse, who had built it as a hotel.⁷ In 1814, it was bought for

¹ MS. letter, Yale University Library.

² MS. letter, Yale University Library and Prudential Committee MS. Records. "Voted that Doctor Jonathan Knight Jun., lately a tutor at this college and now resident in Philadelphia, be authorized to procure for the medical institution established here, anatomical preparations, to the amount of two hundreds dollars with the advice of Doctor Casper Wistar."

³ MS. letter, Yale University Library.

⁴ MS. Records, Yale Corporation and Smith, *Life of Nathan Smith*, New Haven, Yale University Press, 1914, p. 91.

⁵ Dexter, *Sketch of the History of Yale University*, New York, 1887, p. 51.

⁶ Triennial Catalogue, 1910, p. 258. In August 1818 "the Corporation authorized the Prudential Committee to procure a Bell for the Medical Institution and Tables and seats for the Lecture Rooms and Dining Hall, also to enlarge the laboratory and to do any other things which appear of indispensable necessity to the organization of the Medical Institution."

⁷ Kingsley, *Yale College*, New York, 1879, II, pp. 64-65.

\$12,500,¹ when the legislature, largely through the efforts of Dr. Nathan Smith, made the school a grant of \$20,000. Within its walls, there were the lecture rooms, sleeping accommodations and study rooms, while in the basement commons were instituted. Academic customs were then introduced, for each morning and evening the medical class would assemble for prayers, at which the different professors officiated, and the rigid rules which governed the Academical Department were here enforced. The innovation, however, met with the most indifferent success and was discontinued in 1824.² A botanical garden, as contemplated in the articles of incorporation, was soon established on grounds adjacent to the medical school building and was maintained at the expense of Dr. Eli Ives. Mr. Frederick Pursh, a well known botanist, was engaged as the Curator of the Garden, but was afterwards kept from accepting it by a more important appointment. Later, Dr. M. C. Leavenworth (M. D. 1817) was employed to make a collection of indigenous plants for this garden, which was soon believed to be the best in this country. Unfortunately, as no endowment was forthcoming, the undertaking was eventually abandoned.³

One more step in the development of the Yale Medical School deserves recognition. In 1826 a General Hospital Society was incorporated to raise

¹ Dexter, *Yale Biographies and Annals*, New Haven, VI, p. 728.

² When the subject of the organization of the Medical College was under discussion in the Corporation, I was present and heard from the Hon. Chauncey Goodrich the following observations, succeeded by a distinct proposition. "The Medical class," he remarked, "having a building devoted to their use and many of them having their rooms there, they constitute in fact a peculiar family, and they ought to have a family constitution. There must therefore be prayers as in the college proper." The proposition was accepted with little discussion, and without inquiring for my opinion. Not being a member of the Corporation, I could not volunteer in the discussion. I did not, however, believe it to be a wise measure, although proposed by a very wise and good man. A transient collection of students, most of them without previous discipline, afforded but slight prospect of a reverent and attentive audience; but the attempt succeeded better than I expected, and some special religious meetings were held in the Medical College on Sabbath evenings. Commons were also instituted in the Medical College as a family; but the experiment was unfortunate. . . . Neither did the inhabiting of the building by the students produce a happy result. They were, in their habits, too familiar, sometimes noisy and rude, and of course the studious individuals were annoyed by their more restless companions. Silliman's remarks on the Medical Institution of Yale College in Fisher, *Life of Benjamin Silliman*, New York, 1866, I, pp. 261-262.

³ Baldwin, *Annals of Yale College*, New Haven, 1881, pp. 263-264 and Bronson, *Biographical Sketch of Prof. Eli Ives, M.D.*, *Trans. Conn. Med. Soc.*, 1867, pp. 311-320. A Sketch of Dr. M. C. Leavenworth by Dr. P. G. Rockwell can be found in *Trans. Conn. Med. Soc.*, 1866, pp. 269-272.

funds for a Hospital at New Haven. As an "auxiliary to the Medical Institution, this Hospital was considered very important, as without an establishment of this kind, it is impossible to communicate medical instruction in the most advantageous manner."¹ Hence, we find the professors in the medical school enthusiastically pledged their professional services to the Hospital and generously, also, gave to it 10% of their incomes from the Medical Institution for five years, in case, in each instance, the sum did not exceed \$100 a year, but, provided it was less than this stated amount, then they promised to increase it to that figure.² The State Medical Society was equally eager to aid in the erection of this hospital, and appropriated for this purpose the yearly amount payable for degrees and also voted that this hospital be so located as best to subserve the interests of the Medical School.³

The first faculty was composed of a remarkable set of men, whose like we rarely meet. At the head of the list stands Aeneas Munson, who was considered at the time of his appointment to the chair of *Materia Medica* and Botany as the Nestor of the Medical Profession in Connecticut, not only on account of his age, but also on account of his intellectual attainments. He was then in his seventy-ninth year, so he was not expected to perform any duties, but his pre-eminence in chemistry, mineralogy, *materia medica* and botany increased by his appointment the standing of the original faculty. He was also supposed to be an experimental alchemist, and possibly was the physician whom President Stiles refers to in his diary as conversing upon this subject until Stiles told him it was a vain and illusory pursuit. His humor, quaint, dry and frequently biting, he considered his infirmity and regretted, but "could not help it." Many examples of it still remain, but one specimen will suffice.⁴ Bronson relates he was once dining with the Yale Corporation at commencement dinner, when President Dwight, who was a good trencherman, remarked preparatory to some observation on diet: "You observe, gentlemen, that I eat a great deal of bread with my meat." "Yes," said the doctor instantly, "and we notice that you eat much meat with your bread." He continued as Connec-

¹ Jewett, *Semi-Centennial History of the General Hospital Society of Connecticut*, New Haven, 1876, p. 29. In Tully's MS. diary he writes in 1808, when a student at Hanover, under Nathan Smith. "The fact is a Student cannot be benefited by practice, at any Medical College, unless he has the advantage of attending a Hospital."

² Jewett, *loc. cit.* and *Trans. Conn. Med. Soc.*, 1865, p. 90. Of the ten corporators, five were Professors in the Yale Medical School.

³ Stiles, *Op. Cit.*, III, p. 845.

⁴ Bronson, *Medical History and Biography*, N. H. C. Hist. Soc. Papers, New Haven, 1877, II, p.

ticut's grand old man in medicine until his death on June 16, 1826, at the age of 92 years.¹

The second member, Nathan Smith, outshines in reputation all the rest and his name looms up larger as the years go by.² He was the only one of the faculty not of Connecticut birth, but the wisdom of his importation from Dartmouth will never be doubted for he still sheds lustre upon the school's origin. Born as the second son of John and Elizabeth Smith at Rehoboth, Massachusetts, in 1762, he early emigrated with them to Vermont, where he spent the first years of his life as a farmer and as a district school teacher, until a sudden call to assist a doctor at an operation awoke his medical talents. After a brief period of preliminary education, he studied under this physician, Dr. Josiah Goodhue,³ and then practiced for two years at Cornish, New Hampshire. His insufficient training caused him, at the end of that time, to go to the Harvard Medical School, where he received, in 1790, the degree of Bachelor of Medicine. Soon after this, realizing his own struggle for an education, he conceived the idea of a medical school at Dartmouth to train better those in New England who wished to follow out a medical career. In August, 1796, he made a written application to the trustees of this college, asking in it their encouragement and approbation of a plan he had devised to establish a Professorship of the Theory and Practice of Medicine. Although the plan was approved by the President and encouraged by some of the trustees, it was then voted to postpone final action for a year.⁴ Undaunted, Dr. Smith decided to go abroad for further study at the University of Edinburgh, borrowing some money for this purpose from friends. Accordingly, leaving his wife and son, he sailed from Boston in December, 1796, to attend for three months the lectures of Monro Secundus on Anatomy and Surgery and Black on Chemistry. His letters home speak of the "prospect of accomplishing my purpose to my mind."⁵ Leaving Edinburgh, he spent three more months in the London Hospitals and returned to Boston early in September, 1797. He came back to find the trustees had decided to accept his plan for establishing a medical department and finally had the satisfaction of seeing a building erected for the school. During this time, in the summer months, he also re-

¹ Dexter, *Yale Biographies and Annals*, II, pp. 811-818, and Thacher, *American Medical Biography*, 1828, I, pp. 401-408.

² Smith, *Life of Nathan Smith*, New Have, Yale University Press, 1914.

³ Smith, *Life of Nathan Smith*, p. 5.

⁴ Hubbard, *Dartmouth Medical College and Nathan Smith. An Historical Discourse*, Washington, 1880, p. 12.

⁵ Smith, *Life of Nathan Smith*, pp. 19-20.

ceived a number of students at Windsor, adjoining Cornish, where he gave them private instruction in medicine. In 1804, we learn from a letter to his friend, George C. Shattuck, that he had then nine such pupils. The trustees voted him, in that year, a salary of two hundred dollars on condition of his moving to Hanover, which he did in the spring of 1805. In spite of the weight of business and with very ill health, he persevered with success, "being banded about from one part of the country to the other,"¹ until, on May 4th, 1810, he determined to leave Hanover, as political parties were "so near a balance" he could expect nothing from either and thought the grant for a medical building might be repealed.² He did not definitely know where to settle, but looked longingly towards Boston, until an offer from Yale College turned his direction towards New Haven, where he came in 1813.

Here he spent the last sixteen years of his life, busily engaged in teaching, practicing and writing. He was original in his views and methods, inexhaustible in resources, sound in judgment and overflowing with strong common sense.³ He could assimilate and store away easily whatever he read, being able to recall it, as well as appropriate data from his own experience, whenever necessary. His keen sense of observation was also commented upon by his associate, Jonathan Knight, his undaunted moral courage, as well as his kindness, assiduity and delicacy in the treatment of his patients.⁴ His affection for his family and friends was also a notable trait of his character, as seen especially in his recently published life. His wide range of personal acquaintances and friends made him the best known man in medicine and surgery in New England. In his lectures, there was no vain show of learning or any attempt at brilliancy, no assumption of dignity or superiority, but his hearers, both friends and students, found him then a man of true erudition and a manifest master of his profession.⁵ His lectures were, generally, entirely extemporaneous and delivered in as plain and simple a style as possible.⁶ The better the students knew him, the more did they admire and revere him. In personal characteristics, he was of medium height, rather thin and spare. His

¹ Smith, *Life of Nathan Smith*, p. 66.

² Smith, *Life of Nathan Smith*, p. 52.

³ Bronson, *Biographical Sketch of Prof. Eli Ives, M.D.*, *Trans. Conn. Med. Soc.*, 1867, p. 814.

⁴ Knight, *Eulogium Pronounced at the Funeral of Nathan Smith*, New Haven, 1829, pp. 16-19.

⁵ Smith, *Life of Nathan Smith*, p. 118.

⁶ Tully, *MS. Diary*, 1808, *Yale University Library and Smith's Life of Nathan Smith*, pp. 53 and 94.

dress was quite plain, very heedlessly chosen and carelessly put on.¹ During this period he was instrumental in founding, with President Allen, the Bowdoin Medical School and lectured there for five years, being assisted at times only in chemistry, anatomy and surgery.² He was also active with his son in establishing the medical school of the University of Vermont, where he gave four courses of lectures on Medicine and Surgery, thus being active in the foundation of four medical schools, which, with Harvard, he thought would "be as much as New England will bear," and the passing years have borne out the wisdom of this statement.³

His reputation was so well established when he came to New Haven that patients flocked to him from all parts of the country, as his ledgers attest, and he not only treated the best families in New Haven, but was called to visit professionally almost every town in Connecticut, as well as many places in other neighboring states. He was a pioneer in a number of operations and the success which attended his medical and surgical treatment was extraordinary.

His writings are few, but they proclaim him now to have been far ahead of his times. The assertion that he has done more for the improvement of physic and surgery in New England than any other man, will by no one (even at this late day) be deemed invidious.⁴ His essays on "The Treatment of Typhus Fever" and on the "Pathology and Treatment of Necrosis" have become classic. In the former he considered the disease as originating from a specific cause, and being self limited in duration and never aborted. He also recognized the rarity of a second attack, and advocated a rational method of treatment which was popular until the last decade. This essay, published in 1824, is, says Welch, "like a fresh breeze from the sea amid the dreary and stifling writings of most of his contemporaries."⁵ His essay on Necrosis introduced better methods of treatment, anticipating those of our modern period. We regret that a Surgery, which he planned to consist of two hundred pages, and to publish in 1823, was delayed in its completion by articles he promised for his son's journal, the Philadelphia Monthly Journal of Medicine and Surgery, as well as various essays.⁶ He refers to the work again in a letter to his friend, George C. Shattuck, on Dec. 8, 1827, and states he expected "to get through it the next summer,"⁷ but it was incomplete at his death.

¹ Tully, MS. Diary, 1808, Yale University Library.

² Allen, An Address Occasioned by the Death of Nathan Smith, Brunswick, 1829, pp. 15-16.

³ Smith, Life of Nathan Smith, p. 122.

⁴ Knight, Eulogium Pronounced at the Funeral of Nathan Smith, p. 15.

⁵ Welch, The Relation of Yale to Medicine, Yale Med. J., 1901, viii, p. 127.

⁶ Smith, Life of Nathan Smith, p. 122.

⁷ Smith, Life of Nathan Smith, p. 137.

Eli Ives, a worthy pupil of a learned teacher, Aeneas Munson, was one of the moving spirits, on the part of the medical society, at the foundation of this school.¹ He was a graduate of Yale, in the class of 1799, and later a student of medicine at the University of Pennsylvania. On the opening of the school, he became the assistant to Munson in the department of materia medica and botany and so continued until 1820, when he succeeded to the chair, the latter having been made Professor of the Institutes of Medicine. This position he held until 1829, the time of Nathan Smith's death, when he was appointed Professor of the theory and practice of medicine and occupied this chair a period of 38 years. At the end of this time, he resumed his first professorship for one year and then became an emeritus Professor for eight years longer. He was, consequently, connected with the Yale Medical School, in some capacity, for forty-seven years. His knowledge of botany was most profound and was accountable for the success of this study at the school. He was also an acute and original observer, who inspired the affection of his students.

Benjamin Silliman's career lay mostly outside of the medical school, for his academic work gave him the reputation of being one of the foremost scientists of this country. He taught chemistry at the school for forty-one years and continued as an emeritus professor for ten years longer, being the last survivor of the original faculty.²

Jonathan Knight, the beloved physician, was the last member of this eminent group of men. He was graduated from the Academical Department in 1808 and shortly thereafter made a tutor.³ While filling this office, he resigned to study medicine at the University of Pennsylvania and took the chair of Anatomy and Physiology upon the opening of this school. In 1838 he succeeded Dr. Thomas Hubbard to the chair of surgery and kept this position until May 1864, being associated actively with the school for 51 years. Courtly, even majestic in figure, he combined all the graces of a gentleman of the old school with an authoritative and convincing manner. After Nathan Smith, he was easily until his death the foremost surgeon in Connecticut. "Conscientious, perhaps in all that time he never did an unnecessary or premature operation" is the tribute paid him by his pupil and successor, Dr. Francis Bacon, while Dr. W. H. Welch declares that he "probably never had his superior in any medical school in this country as a finished lecturer."

¹ Bronson, Biographical Sketch of Prof. Eli Ives, M.D., Trans. Conn. Med. Soc., 1867, pp. 811-820, and Dexter, Yale Biographies and Annals, IV, pp. 358-362.

² Fisher, Op. cit.

³ Kingsley, Yale Book, New York, 1879, II, pp. 72-73; Hooker, Biographical Sketch of Jonathan Knight, M.D., Trans. Conn. Med. Soc., 1865, pp. 147-151; Bacon, The Beloved Phy-

I have thus tried to show the successive steps in the evolution of medicine in Connecticut from its low colonial standards to the foundation of the Yale Medical School. The first era of improvement began, as we have seen, with the advent into the state of John Winthrop, Jr., the Governor from 1657-1676, who lent to medicine a dignity and a love of its science and art which was of lasting benefit. Subsequently the gradual realization of the importance of some regulation concerning the right to practise led eleven Norwich physicians to memorialize the legislature for the enactment of a law of this nature. Unfortunately, it failed to pass. Then a fuller sense of the importance of medical union led some New Haven physicians to band themselves together for mutual improvement and to raise the standard of medicine in the state by the formation of a state society. In their efforts to accomplish this latter object, they published the first transactions of any medical society in the United States. The organization of the State Medical Society was the next step, which soon caused its members to realize their own educational shortcomings and to appreciate the crying necessity of better facilities for the study of medicine in this state. And finally came the foundation of the Yale Medical School, which was due, in the evolution of medicine in Connecticut, to no private enterprise, but arose from mutual efforts for medical improvement on the part of Yale College and the Connecticut Medical Society. "Even if there were no other claims, this origin," says Dr. Welch, "should entitle the Yale Medical School for all time to the fostering care and support of its parent"—its surviving parent, Yale University.¹

Time fails me to speak of the school's trials and successes. She has ever been at the forefront of medical progress in the effort to raise the standard of medical education from the time she introduced, at the behest of the Northampton Convention, entrance requirements and lengthened her course of study. She also early introduced recitations and from 1867 has given laboratory instruction in the necessary branches. Early in the administration of the sec-

sician. A Discourse Delivered in First Church in New Haven at the Interment of Jonathan Knight, M.D., New Haven, 1864. In this pamphlet is also found Dr. Francis Bacon's remarks commemorative of Professor Knight Addressed to the Students of Medicine in Yale College, on September 19, 1864; and Dexter, Yale Biographies and Annals, VII, pp. 213-216. Professor Knight's two introductory lectures, published in 1838 and 1853, have been invaluable in the preparation of this paper on account of both going into the early history of the medical school.

¹ Welch, Op. cit. I have introduced the word surviving for if Yale is the *alma mater* of her medical graduates, the Connecticut State Medical Society is just as surely their *almus pater*.

ond Dwight, she almost reached the point of dissolution, but fortunately, through his generosity and co-operation, she weathered the storm, with the assistance of her former dean, Herbert E. Smith. Now her continued existence is again and probably finally threatened. Without the raising of a sufficient endowment, it is hard to see how she can survive, yet it was with a heroism which demands recognition that her professors, living and dead, have labored on in the face of the most discouraging circumstances, with insufficient salaries, but with a self-sacrificing, enthusiastic devotion to equip thoroughly her graduates. The dead are mute witnesses, but the living have testified, still testify, and will testify how her graduates have come into their midst and brought skill, solace and conscientious care to them.

I know of no greater opportunity to him that hath of this world's goods than that of assuming the role of a Joshua and of bringing the school out of the wilderness of its increasing financial difficulties into the promised land of a plenteous endowment and a closer affiliation with the New Haven Hospital. This remuneration is hers by right of such an honorable heritage that to-day "her children rise up and call her blessed."

*LAWS, &c.

SECTION I. *Of the Government of the Medical Institution.*

ART. I. THE Government of the Institution shall be vested in the President and Academical and Medical Professors, who shall be styled "the Faculty of the Medical College."

2. The President shall call the meetings of the Faculty: no vote shall be valid without his consent: and when the members present shall be equally divided, the President shall have a casting vote.

3. In case of the death, sickness, or absence of the President from the town, the senior Professor may act in place of the President, in all the above cases, and with the same power.

4. Seniority among the Professors shall depend on their respective ages.

5. The Medical Professors shall continue a board for the determination of minor concerns of discipline—instruction, &c.—not expressly reserved to the Faculty, or not necessary, in the opinion of the Medical Professors, to be brought before the Faculty.

SECTION II. *Admission and Membership.*

ART. I. Every candidate for admission into the Medical Institution, shall produce satisfactory evidence of a blameless life and conversation.

2. Before being admitted to attend the lectures, or any of them, each candidate shall subscribe the following promise:

• Reproduced as first published in 1815.

I, A. B. on condition of being admitted as a member of the Medical Institution of Yale College, promise, on my faith and honour, to observe all the laws and regulations of this Institution, particularly that I will faithfully avoid using profane language, gaming, and all indecent, disorderly behaviour, and disrespectful conduct to the Faculty; as witness my hand, A. B.

4. The name of the candidate thus subscribing, shall then be registered in a book kept by the junior Medical Professor, and called the Matriculation Book for the Medical Institution.

5. At the time of his matriculation, each candidate shall pay to the treasury of the College, the sum of five dollars; and the money thus accruing, shall be expended to augment the medical library and museum, or for such other purposes as shall be judged by the Faculty most conducive to the interests of the Medical Institution;—provided nevertheless, that those students, who are, by law, exempt from paying the fees for the lectures, shall be exempt also from paying the fee of matriculation.

6. Before being admitted to attend the lectures, every student shall give a satisfactory bond to the treasurer for the payment of his term-bills.

SECTION III. *The Sabbath and Religious Worship.*

ART. 1. It is enjoined upon all the Students to observe the Lord's Day as holy, and sacred to the duties of religion: and if any Student shall profane the said day by unnecessary business, by diversion, or by walking abroad, or shall be absent from his chamber on this day, or the preceding evening, or shall thereon admit any other Student or a stranger into his chamber; or on the preceding or following evening shall make indecent noise or disturbance, or shall behave indecently or profanely at the time of public worship, or at prayers, he may be punished as the nature and demerit of the crime shall require.

2. Every Student shall, on the Sabbath, attend at some place of public worship.

3. The students shall attend prayers morning and evening, at such hours as the Faculty of the Institution shall direct.

SECTION IV. *The Lectures.*

ART. I. Every Student shall punctually attend on all those lectures, for which he shall have taken tickets; he shall take notes of the heads of the lectures; and each Professor shall, at such time as shall be most convenient, examine his class on the subject of every lecture which he delivers.

2. Every Student who wishes to be absent from a lecture, must obtain leave of a Professor; and, if leave cannot be conveniently obtained beforehand, he must as soon as may be afterward, render a satisfactory reason to the Professor, from whose lecture he is absent.

3. There shall be a Monitor appointed for the lectures of each Professor; and it shall be his duty to note all absences, or instances of egress, or unreasonable tardiness, and report them to the Professor.

4. No Student may absent himself from the town during the continuance of the courses, or cease his attendance upon them, without leave of the President or a Professor.

5. It shall be the duty of the Medical Professors to report to the President, a scheme of the number and arrangement of the lectures; and the courses shall continue from November 1 to April 1.

6. The Professor of Botany may lecture on that subject in the summer, should he prefer it.

7. The Medical Students shall be permitted to attend the lectures of the Professor of Natural Philosophy and Mathematics, on paying to him the same fee which they pay to each of the Medical Professors; and one half of the money thus arising, shall go to the said Professor, and the other half to the President and Fellows.

SECTION V. *Locations and Hours of Study.*

ART. I. The rent of the rooms in the Medical College shall be 20 dollars for each room, except the large rooms in the wing, with their appendages, which shall be 30 dollars for each. The regular number for each room in the main part of the Medical College, shall be four and in the wing six; if, however, the occupants choose to admit more, they shall be permitted so to do; and the

entire rent of the room shall not be augmented on that account; on the contrary, if a smaller number of persons should choose to occupy a room to the exclusion of others, they may do it, with the consent of the Medical Professors; but, in that case, they shall be charged with the whole rent of the room. Should any room not contain its full complement, in consequence of a deficiency of applicants, those who occupy it shall still be charged only five dollars each.

2. Leave to occupy other rooms, not in the Medical Institution, may be granted by the Professors on account of sickness or other sufficient reason.

3. A Location Bill shall be kept by the Junior Professor, and said bill shall contain a list of those who do not as well as of those who do reside in the Medical College.

4. The Students shall confine themselves to their rooms from half an hour after breakfast in the morning, till noon, from two o'clock to five in the afternoon, and after ten o'clock at night; with the exception of such hours as are devoted to the attendance on the Lectures and prayers, or such times as they are permitted by the Professors to pursue other employments.

5. It shall be the duty of the Medical Professors occasionally to visit the rooms of the Students, and they, or any of the Faculty, may break open any room, closet or study, where admittance is refused.

SECTION VI. *Inspection of Rooms and Assessment of Damages.*

ART. I. It shall be the duty of the College Joiner to visit all the rooms of the Medical College, at the beginning and close of each term, or oftener if there be occasion, and to estimate all the damages which have been done since the preceding inspection, and these damages shall be charged in the term bills of those who occupy the room, unless they can show that the damages were done by others, in which case they shall be charged to them; for this service the Joiner shall receive a reasonable compensation, to be settled by the Prudential Committee.

2. Any Students who shall wantonly cut, bruse, break, or deface any part of the Edifice devoted to the Medical Students, shall be liable to censure, or even dismissal, at the discretion of the Faculty.

3. All damages done to any part of the Medical College, except the private rooms, shall be equally charged to all those who inhabit the building, unless the author of the injury can be ascertained, in which case he shall make it good.

4. It shall be the duty of the College Joiner to see all damages repaired as soon as may be.

5. A sweeper shall be appointed, whose duty it shall be to cause the public and private rooms, passages and appurtenances, to be kept clean and in decent order, for which service he shall receive a compensation, to be settled by the Prudential Committee.

SECTION VII. *Crimes and Misdemeanors.*

ART. I. Every Medical Student shall be subject to the laws and government of the Medical Institution, and shew, in speech and behaviour all proper tokens of reverence and obedience to the Faculty of the College, as well as of the Medical Institution. And if any Student shall transgress this law, by treating them, or any of them, with reviling or reproachful language; or by behaving contumaciously or contemptuously towards them, or by being guilty of any kind of contempt of their persons or authority, he may be punished by any censure, even to expulsion, as the nature and aggravations of his crime may require.

2. If any Student shall deny the Holy Scriptures, or any part thereof, to be of divine authority; or shall assert and endeavor to propagate among the Students any error or heresy, subverting the foundation of the Christian religion and shall persist therein after admonition, he shall be dismissed.

3. If any Student shall be guilty of Blasphemy, robbery, fornication, theft, forgery, duelling, or any other crime, for which an infamous punishment may be inflicted by the laws of the State, he shall be expelled.

4. If any Student shall assault, wound, or strike, the

President, a Professor, or a Tutor, or shall maliciously or designedly break their windows or doors, he shall be expelled.

5. If any Student shall be guilty of drunkenness, fighting, striking, quarrelling, challenging, turbulent words or behaviour, wearing women's apparel, fraud, lying, defamation, or any such like crimes, he shall be punished by admonition, or other Collegiate punishment, suited to the nature and demerit of the crime.

6. If any Student shall break open the door of another, or privately pick his lock with any instrument, he shall be admonished or otherwise punished, as the nature of the offence may deserve.

7. If any Student shall be guilty of any injury to a fellow-student, or to any other person within the town of New-Haven, upon complaint and proof thereof made to the President, he shall, with the advice of the Professors, give judgment thereon, and order satisfaction to be made according to the nature of the offence or injury; which, if any Student refuse to do, he shall be admonished; and if after admonition, he persist in such refusal, he shall be dismissed.

8. Every Student, in studying time, shall abstain from hallooing, singing, loud talking, playing on a musical instrument, and other noise, in and about the Medical College, or any of the College Buildings.

9. No Student shall keep, or use fire-arms, or gunpowder, in, or near any College Building, or near the person, or dwelling, of any officer of the College.

10. No Student shall stake money, or other property, in any game of hazard, or play at such game at all, within the College Buildings, or within the city of New-Haven, or any Student's room, or keep cards, or any instruments of games of hazard in his chamber.

11. If any combination or agreement to do any unlawful act, or to forbear compliance with any injunction from lawful authority in the College, shall be entered into by the Students; or if any enormity, disorder, or act of disobedience, shall be perpetrated by any of them, in consequence of such combination or agreement, in both or either of those cases, such and so many of the offenders, shall, upon due conviction, be punished with admo-

nition, dismissal, or expulsion, according to the circumstances of their offences, as shall be judged necessary for the preservation of good order in the College.

12. In all cases when an offence is committed frequently or daringly, the Faculty shall have power to enhance the punishment at their discretion: In all cases the Faculty may accept an ingenuous confession, in lieu of a penalty, except where the law requires expulsion.

13. If any member of the Medical Institution should continue to reside in New-Haven from the termination of the courses to their re-commencement in the autumn, he shall continue subject to all the laws which respect moral conduct and behavior, as in term time.

14. Whenever, in the opinion of the Faculty, the farther continuance of any Student in the Medical Institution becomes injurious to it, and has ceased to be advantageous to himself, he may be privately dismissed, or directed to withdraw from the Institution; but, in that case, the fees which he may have advanced shall be refunded in proportion to the time which may remain, before the conclusion of the lectures.

15. Whereas the Laws of the Institution are few and general, and cases may occur which are not expressly provided for by law; in all such cases the Faculty shall proceed according to their best discretion, and may punish a Student by inflicting any College censure, according to the nature and circumstances of his crime.

16. A copy of every sentence of dismissal, or expulsion, shall be delivered to the party concerned, with liberty of appeal to the Corporation or the Prudential Committee.

17. Every Medical Student shall be furnished with a copy of these laws, the price of which shall be charged in his term bills.

SECTION VIII. *The Library.*

ART. 1. The Members of the Medical Institution shall be allowed to borrow books from the College Library, in the same manner, and under the same restrictions, as the Junior and Senior Classes of Undergraduates in the College.

ART. 2. The Medical Library shall be committed to the care of the Medical Faculty, who are hereby empowered to make such bye laws and regulations for the management of the same, as they may deem necessary, with power to alter and repeal them with the consent of Prudential Committee.

SECTION IX. *Of Commons, and College Dues and Bills.*

ART. I. The Steward appointed by the Corporation shall, when required by the President, provide in the dining room of the Medical College, victuals, after the manner of living in common families, for all the Students of the Medical College; and shall, at all times, cause the tables to be decently spread and attended, at such a price as shall be fixed by the Corporation. And if any Student residing in the College refuse to be in commons, he shall be dismissed from the College.

2. No Student residing in the College shall put himself out of commons, but with the leave of the President, or of the Medical Professors; and no Student shall be put out of commons, without a written order from the President, or one of the Professors: Nor shall any such leave, or order, be granted to any Student residing in the College, saving only in cases of sickness, unless he properly belong to some family in the town of New-Haven, in which case he may be permitted to receive his diet in such family, when requested, and in no other. The Faculty, however, shall be authorized to grant an exemption from being in commons to any Student, for other reasons than of sickness, when they shall appear sufficiently great and urgent to justify the same.

3. At every meal, provided no officer of the Institution is present, the Students, according to an order established by the Faculty, shall ask a blessing and return thanks: and all the Students shall at meal times behave themselves decently, abstaining from all rude and loud talking, and keeping in their places until thanks shall have been returned. No kitchen furniture or utensils shall be carried out of the dining-room or kitchen, nor any victuals to any student, unless in case of sickness,

or for other good reason, and by an order from a Professor. If any Student transgress in either of these things, he shall be punished according to the circumstances and aggravations of the offence.

4. Waiters shall be appointed by the President, who shall attend the tables in the dining-room every meal; for which a reasonable compensation shall be made them by the Steward. It any waiter, before the end of the term for which he was appointed, shall cease to wait, without leave first obtained of the President, he shall forfeit his compensation for the preceding part of the term. The waiters, before they leave the dining-room after each meal, shall make a return in writing to the Steward, of all damages done to the utensils at said meal, and of the names of the persons who did the same, if known; and shall see that all utensils delivered into the dining-room be returned back into the kitchen. If the waiters neglect to comply with this law, they shall be accountable to the Steward, and charged in their term bills for all damages sustained through such neglect. The Steward shall keep an account of all damages notified by the waiters, and all other damages and loss of utensils, and the same exhibit every term to the Prudential Committee, who shall assess such damages and losses, unless such as happened through his default, or the default of his servants in the kitchen, and charge the same in the Steward's next term bill, to the persons by whom they were done, or through whose neglect or default they happened, if known; otherwise to all the Students who were in commons at the time, or during the term when they were done or happened.

5. Towards the end of each term, the Steward shall write a bill of the several sums payable to him for commons, at the price stated by the President and Fellows, with a duplicate thereof, both which bills he shall present to the President; and the President, having approved and signed them, shall deliver one of them to the Steward, and keep the other himself, and thereon take a writing signed by the Steward, acknowledging the receipt of the other bill, which he shall be authorized to collect of the Students.

6. All the Students in the Medical College shall pay their respective shares of the Steward's salary.

7. No Student shall board in any public inn or tavern in New-Haven.

8. The other bills of the Students shall be made up and collected twice a year, by the treasurer; viz: at the close of the two first terms of the year; for which service the treasurer shall receive a proper compensation, to be settled by the Prudential Committee.

9. Every Student residing in the Medical College shall be charged for sweeping, making beds, &c. in the same manner as the Students of the Academical College; and every member of the Medical Institution shall pay 1 dollar for contingent charges.

11. All bills shall be payable as soon as delivered; and no Student shall be admitted to an examination for a license or a degree, or receive any certificate of his having attended the lectures, till all his bills are paid, and certificates produced from the proper persons to that effect.

12. The fees for attendance on the lectures shall be paid in advance, by the Students, to the Professors, as soon as the tickets of admission to the respective courses shall be issued by the Professors.

13. The members of the Medical Institution, boarding in commons, shall pay their full proportion of the steward's salary, servant's wages, fuel, and rent of the common's rooms, up to the end of the term of the lectures, whether said students continue through the term or not;—the Prudential Committee, or in their absence, the Medical Professors, to have power to grant relief, when they deem it necessary.

PRE-MEDICAL STUDIES IN THEIR RELATIONS TO GENERAL AND PROFESSIONAL TRAINING.

By PROFESSOR WILLIAM HENRY HOWELL, M. D., LL. D.

OF JOHNS HOPKINS UNIVERSITY.

The completion of one hundred years of honorable service is an achievement that calls for sincere congratulations. Very few American schools of medicine have attained to the dignity in age and work implied by such an anniversary, and it is fitting and natural to make it the occasion for tributes of loyalty, affection and pride. But there is an added pleasure in feeling that the exercises to-day not only serve to commemorate the termination of a long period of solid success, but mark also the beginning of a new era in which the acquisition of adequate resources and greater opportunities stand as a guaranty of a brilliant future. I feel greatly honored that I am allowed to participate in the celebration of an event so gratifying in itself and so full of significance in its relation to the progress of medicine in this country. The occasion seems to suggest a consideration of some of the problems that the medical school must face, and I shall utilize the opportunity to discuss briefly one phase of medical education that is still unsettled. The topic is a bit hackneyed I confess. Addresses on medical education have fallen on us in recent years "thick as autumnal leaves in Vallombrosa." It passes the ingenuity of man to devise even a new title for an address of this sort. But, on the other side, we must remember that for our generation the problem is intricate, as well as important, and that it exhibits besides a many-sidedness which tends always to provoke a re-discussion. I need not bother you with details concerning the origin of the unsatisfactory conditions that have existed and in part still do exist. They are all set down clearly and succinctly in the admirable report made by Mr. Flexner in 1910 to the Carnegie Foundation for the Advancement of Teaching. The fundamental point, it seems to me, is that the system of proprietary medical schools which arose in this country found themselves unfitted to meet the demands forced upon them by the progress of the physical and biological sciences. The ever-increasing call for instruction in the methods of the pure and the applied sciences made it impossible for medical schools to run on a paying basis. To force this conviction home there has been in operation for some years what may be called a destructive campaign, aimed primarily at the proprietary system. This campaign has been conspicuously successful. To-day practically all medical

schools that hope to survive have obtained or are seeking an affiliation with established universities. Along with this absorption of the better schools into the corporate existence of the university, there has gone a suppression and merging of the smaller institutions, with the result that the total number of medical schools has fallen from 160 in 1907 to 110 in 1913. The proprietary medical school as a typical national institution has disappeared or is disappearing from the stage. The destructive campaign waged against the principles it represented may be considered as practically closed. On the other hand, the constructive work necessary to adapt medical instruction to the new affiliation with the university is in process of development, and considerable confusion and uncertainty prevail in regard to the form which our American system of professional training in medicine will finally take. Many experiments are being tried. It would appear that the medical school as it exists does not fit well into our scheme of education, and in the absence of some high authority that might forcibly alter and adjust the relations between general and professional training we must be content to evolve our system by the old but troublesome and time-consuming method of trial and error. During this process of adjustment the medical student is liable to be submitted to some unnecessary stress. On the one side there is a demand that he shall come to his medical work with an ample general education and with special technical instruction in all those ancillary subjects which may seem to be useful in his calling. On the other side there is a growing feeling in the minds of the public as well as the medical profession that the graduate in medicine before he is let loose on the community should have a fuller experience in the practical side of his art, an experience such as may be obtained, for example, by practice under supervision in a hospital. Between this pressure from below and pressure from above the medical student is caught as between the upper and nether mill-stone and he is likely to be ground finer than is needful for the work he has to do in later life. In regard to the proposal of adding a compulsory hospital year to the medical curriculum we deal with a question that the clinicians are best qualified to discuss. The fact that in our best medical schools most of the graduates find it desirable to seek a year or more of hospital practise would seem to indicate that the practical instruction given in the school itself is inadequate, but whether this need can be met best by modifying the present methods of instruction in the school or by adding a compulsory hospital year is a point upon which I am not inclined to pass judgment, although, it does seem quite possible that the defects on the practical side may be the result simply of a faulty organization of the work in the preparatory years. If we could eliminate the errors of the initial part of the medical curri-

culum, the troubles in regard to the clinical instruction might adjust themselves without compelling us to resort to the device of adding another year to the course. The phase of our problem which interests me most and which ought first to be solved, is the nature of the preliminary training that should be required of the medical student. You know what diversity of opinion and practice prevails at present in regard to this matter. The Association of American Medical Colleges requires as a minimum of preliminary training the equivalent of a high school course. The Council of the American Medical Association advises and in a measure compels the addition of one year of college work in which shall be taught a certain amount of physics, chemistry and biology and either French or German. A large and increasing number of the good schools demand two years of college work to be devoted mainly to the underlying sciences, while some require three years of college and a few insist upon a complete college course. It seems to be agreed quite generally that the drift at present is setting toward the plan of requiring as a preliminary two years of college study in which shall be included as much as possible of physics, chemistry, biology and modern languages. On this plan the student enters the medical school after the completion of his sophomore year and, on the average, in the 20th year of his age. The two college years are given over mainly to special work that is preparatory to medicine and in this sense they supply technical training, but there is included or may be included in these years certain studies that have no special bearing upon medicine and are designed to round out the liberal education of the student. This condition is an implied admission that the boy at the end of his high school course, at the average age of 18 years, is not quite provided with an adequate general training. On the contrary, as is well known, the boy at this age in Germany or France is considered sufficiently prepared to begin his technical education in medicine and the other professions. It seems to be admitted quite generally that the German boy in his 18th year, after the completion of his courses in the Gymnasium or Realschule, is in fact more thoroughly educated than our boys at the same age. He has gone farther in the fundamental studies of mathematics and the modern and ancient languages.

Attention has been directed frequently to this fact and only recently the whole matter has been presented in a forcible way by the report of a Committee of the National Council of Education on Economy of Time in Education (U. S. Bureau of Education, Bulletin, No. 38, 1913). It is to be hoped that the sensible recommendations of this vigorous report will be generally adopted.

If we consider the medical curriculum in its wide sense we may say that it

consists of two parts, one preparatory, dealing with the structure and properties of the living organism, chiefly, of course, the human organism, and comprising a study of the sciences of physics, chemistry, general biology, anatomy and physiology, and one more directly practical, dealing with the structure and phenomena of the abnormal or pathological organism, including therefore the subjects of pathology, medicine, surgery, gynecology and obstetrics and the several specialties falling under these general heads. The difficulties surrounding medical instruction in these latter days are traceable largely to the great growth in knowledge and methods in the physical sciences and the successful effort made to apply this knowledge to the biological sciences both on the normal and the pathological side. Naturally the medical student must be put *au courant* with this modern development and in this as in other things it is very difficult to draw a satisfactory line between the time given to preparation and that devoted to application. Not a few of the writers upon medical education, especially among the clinicians, have manifested some impatience and dissatisfaction with the amount of time given to the confessedly preparatory subjects. It may be admitted in fact that considering the whole time available for instruction the teachers of the underlying studies have shown a tendency to magnify the importance of their side of the work. It is natural that they should have taken this attitude, for theirs has been the newer and more rapidly growing factor in medical progress. Moreover, when we consider the great range exhibited by medicine in all its ramifications it is evident that the proper preparation of a student for any and every contingency of practice becomes an undertaking of distressing complexity, so that the temptation to keep adding to this side of the curriculum is always pressing upon us. There is constant need for those of us charged with the duty of determining the content of the medical curriculum to oppose the introduction of unnecessary courses and to insist on a concentration upon the really fundamental studies. We are hampered very much at times in this work by traditions that have grown up in the schools and by regulations, frequently of a highly special character, that are imposed from without. But looking at the matter in a general way it would seem to be fair and equitable to divide the available time equally between the period of preparation and the period of practical work. It is probable that the accepted length of the entire course in medicine will be six years and on this basis one might assign three years to the preparatory or premedical subjects of physics, chemistry, biology, anatomy and physiology, and three years to the medical subjects proper, including pathology, medicine, surgery, etc. The subjects under the first group should be taught in the university or under its direct auspices, and

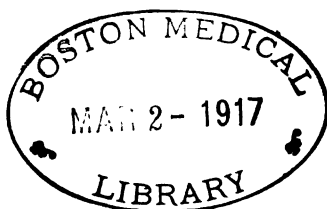
be open to students of all departments. Anatomy and physiology as they are given in our best schools are presented in the same scientific spirit as physics and chemistry, and like these sciences they have, pedagogically considered, a broad liberalizing influence and a direct bearing upon many vocations in modern life beside the care of the sick. On the other hand the subjects of the last three years should be given in the hospital. The instruction during these years whether at the bed-side or in the laboratory, should be clinical in spirit, and the patient should be the focus upon which all lines of interest converge. A division along these lines would assign to each of the great institutions concerned in the education of the medical student, the university and the hospital, the portion of the work which it is best qualified to perform. It would have possibly an additional advantage in that the greater time given to the practical subjects might remove the necessity for considering the addition of a compulsory hospital year to an already extensive curriculum.

Under our present arrangement the group of preparatory studies requires more than half of the entire six years, owing partly to the fact that some of the work is given during the period of general education and indeed as a part of that education, and partly also to the historical alliance of anatomy and physiology with the medical rather than with the philosophical faculty of the university. In regard to the latter factor it seems to me that there are some signs of a readjustment of relations. Speaking for my own subject of animal physiology, it is a science that has developed almost wholly under medical auspices. There was a time, not long distant, when physiology comprised practically all there was of the experimental side of medicine; but in the nature of the case this unique distinction has not been retained. The subject has segmented off other important experimental sciences, such as physiological chemistry and pharmacology and moreover there have arisen laboratories of experimental investigation in the more practical branches of pathology, medicine and surgery. Just as in the great industries special research laboratories have been developed to further the interests of applied science, so in the clinical subjects experimental laboratories have been organized to perfect the application of scientific methods to the study and cure of disease. The time is passing I believe when the skill of the professional physiologist will be called upon for the study of pathological conditions. Men with the necessary training for such work will be found in the clinical departments themselves, particularly if the plan of having a full-time staff of teachers in these subjects is generally adopted. The individual physiologist will carry on his work where his interests and special training may direct, whether on the practical or the theoretical side. But for

the most part and as a general principle I venture to predict that in the future the work of the physiological laboratories will be confined more and more to the theoretical or fundamental problems of living matter. Physiology as conducted in the laboratories of the medical school will tend to assume the form of a pure rather than of an applied science. Its affiliations with the departments of physics, chemistry and biology in the university will be drawn closer, and the workers in its ranks by virtue of the special training they will need in the physical sciences will be recruited from the graduates of the philosophical faculty rather than from those of the medical school. If this condition of affairs comes to pass medicine will not be the loser by the change. In working out its immediate problems it will command the services of clinicians trained in the methods of the fundamental sciences, while for its future methods and points of view it will have the assistance of the intermediate physiological sciences.

It needs no argument to prove that the really fundamental characteristics of life must be studied by men who are interested to push their inquiries in every possible direction, theoretical and practical. The clinician cannot well devote himself to this wide field, he has other most urgent demands upon his time and talents. But in the long run it is the theoretical or catholic spirit of inquiry that brings to light the epoch-making ideas. It needs little imagination to realize that in the great realm of living nature we have advanced but a little way. The mind of man will strive to understand and control those processes which now seem so mysterious and remote, and we may believe that the workers in pure science, the men who are investigating simply for knowledge's sake, will eventually unravel secrets that will give us a command over the conditions of life and death far in excess of anything we now imagine.

Pure science and applied science, theoretical and practical studies, must both be pushed forward. On the latter side it is safe to say that nowhere are more remarkable results being obtained from the application of science than in medicine. The armamentarium of the practising physician has been greatly enriched in recent years with weapons of power and precision. The methods of the physical and biological sciences have been laid under contribution to furnish the means of recognizing and differentiating diseased conditions, and the knowledge of these things obtained first by the specialist is quickly passed over to the practitioner through the medium of the medical press and the medical societies. The opportunities for further progress of this kind are so inviting that it is small wonder that any enthusiastic graduate in medicine, who has a desire to investigate, is drawn chiefly into this kind of work. The wards and clinics are full of patients offering problems for solution that modern scientific



methods may hope to solve in part at least, and to this urgent work the medical research laboratories must of necessity first direct their energies, using in their work all the appliances and knowledge that the underlying sciences can furnish. But, on the other hand, it is evident that the phenomena of life offer certain great problems for whose investigation adequate methods have not yet been devised. The mysteries of metabolism and growth, of development and heredity and consciousness are but dimly comprehended. Our knowledge and methods for the study of these things are too incomplete to be handed over to medicine for practical purposes; but we realize that the worker who is fortunate enough to make a significant discovery in these fields will thereby furnish to practical medicine the kind of assistance that it most needs. Discoveries of this sort may come to workers in any branch of pure or applied science, but in all human probability the initial steps taken will be by the investigators in pure science. Therefore, it will be advantageous for the progress of medicine if the tide of development sets, as I believe it is setting, in the direction of organizing the laboratories of anatomical and physiological research in the spirit of pure science, and the laboratories of the clinics and special institutes of medicine in the spirit of applied science. Each kind of work is needed and the interests of both should be fostered by the university.

On the teaching side the main difficulty with the curriculum, so it seems to me, is in the premedical studies; in the necessity for their simplification and concentration and for their articulation with the plan of general education. If we can effect a proper economy of time and effort at this point the good effects will extend throughout the entire curriculum. The years given to the medical school are arranged or can easily be arranged to conform to a common pattern in which there is little than can be changed or improved so far as the subjects or their sequence is concerned. But the foundation on which it is proposed to build this system of medical instruction is not so uniform or compact. At one extreme we have the system inaugurated by the Johns Hopkins University some twenty years ago and still maintained, although somewhat disturbed as to its uniformity by the unforeseen introduction of the so-called combined courses in some of our colleges. Candidates for matriculation in this school are required to show graduation from a college in good standing and in addition must present credentials for a specified amount of work in physics, chemistry, biology and Latin, and a reading knowledge of French and German. These special requirements may be estimated as requiring about two years of the college course, so that in effect this school proposes a six years' course in medicine based upon the general education received at the end of the sophomore year. The

specific requirements demanded of the college by this school have been adopted more or less by other good medical schools and have been paralleled to some extent in other professions, with the result that there has been injected into the college course a certain amount of vocational or technical training that has confused and perhaps destroyed the simple ideal that formerly prevailed. A change of this kind was inevitable, but it is proper to ask whether all of the specific requirements laid down are justified by the necessities of the case. Every one perhaps will admit that a premedical course must embrace a certain amount of work in physics, chemistry and biology. These subjects are regarded generally as essential to the study of medicine. If the student comes to his medical work without this preparatory training he will find it necessary to pick it up in some indirect way during his course, and in view of the crowded condition of the medical curriculum this possibility is practically excluded save for men of exceptional ability and determination. I do not believe that we can take the same position in regard to the requirements in Latin, French and German. A sound knowledge of Latin is without doubt a valuable accomplishment for a physician. In many ways it may become an agreeable and graceful accessory to his work, but no one can maintain that it is essential to the study or the practise of medicine. When, furthermore, the amount of Latin demanded falls to the very low minimum exacted in the requirements of medical schools its value as an accomplishment becomes altogether negligible. Neither in this sense nor as an instrument for learning does it possess any real value in the study of medicine and I am of the opinion that medical schools should omit all mention of Latin among their requirements for matriculation. In expressing this opinion I do not intend, of course, to make any criticism of Latin as a means of culture or as an educational discipline. Whether or not it fulfills a useful purpose in these respects in the scheme of secondary education is not for me to discuss, but I am convinced that there is a certain absurdity and impropriety in listing it as a requisite for the study of medicine. In the days when medical books were written in Latin and the lectures and examinations were conducted in that tongue, a knowledge of the language was essential to the study of medicine, but those days have long gone by, and the exiguous remnants of former conditions that linger with us in prescription writing and technical nomenclature are avoided rather than cultivated by the best practice of the day. The pedant or the man who takes pride in a little knowledge may find some pleasure in using *aqua destillata* in place of distilled water, but fortunately such trivialities are no longer reckoned as signs of an educated physician, nor is there any need of such a thin veneer to conceal medical wisdom, or

the lack of it, from the public gaze. With regard to French and German the conditions are different. A knowledge of these languages may be of real value to a student or practitioner, for it opens to him a wide literature bearing upon the present condition and progress of medicine. He who can make use of this literature enjoys a material advantage over the student whose reading is limited to his own tongue. Nevertheless, it seems to me inadmissible to consider these languages, one or both, as in any way essential to the acquisition of a sound knowledge of the art or science of medicine. Whatever of importance may arise in foreign countries is quickly made accessible to our medical public by translations and through our journals. In the matter of text-books and records of the advancement of medical science we are wholly independent of foreign publishers except as regards the limited class of investigators. So far as the medical student is concerned he can obtain a full and satisfactory knowledge of modern medicine without knowing a word of French or German, and as a matter of fact I do not believe that a serious attempt is made in any of our best schools to utilize these languages in the instruction of students. For these reasons it would seem to be sensible not to include any requirements in regard to French or German in our entrance conditions. Study of these languages should be recommended to medical students—indeed, to my mind, some acquaintance with modern languages ought to constitute a part of the liberal education of every one; but this is a different matter from taking the stand that French or German, or French and German are essential to the study of medicine and on this ground to exclude men from the profession who are otherwise qualified to enter it. There would be a real gain to the medical school in its relations to the underlying parts of the educational system if it limited its specified requirements for entrance to subjects that are really essential to the successful pursuit of a medical career. The conditions that are essential and which the school has a right to insist upon are in the first place the special requirements in physics, chemistry and biology, and in the second place the general requirement of a liberal education, defining this latter phrase in terms of some accepted standard of our educational system as it exists. French and German may well constitute a part of such a liberal education, but I see no valid reason why Spanish, or Italian, or Russian might not be accepted as substitutes. The discussion and decision as to what shall be contained in a liberal education may be left in the hands of those who are most directly concerned with the problem, and we should not inject into this problem any conditions in respect to the preparation for medicine that are not essential. If we accept this general point of view the question that the medical school has to determine is what stage in our

educational system may be accepted as constituting the completion of an adequate general education. Shall it be the high school, the sophomore year or graduation from college? All three standards are proposed. To my mind, a really satisfactory decision of this question is scarcely possible at present, owing to the fact that at no stage in our educational system is a clear line drawn between a liberal and a special or technical training. If the efforts that we are now making to improve our system of primary and secondary schools by elimination of less important, and concentration upon fundamental studies are as successful as they should be, they will result in bringing the instruction in these grades to the standards prevailing in France and Germany. Our boys and girls in their 18th year, at the end of the high school period, will have received a sufficient basis in general information and training, and like their foreign companions will be prepared to begin the special education that looks forward to a vocational application.

On such a foundation we could readily erect our medical superstructure in six years. Under these conditions it would be possible, as I have before stated, to arrange our medical courses with reference to effectiveness and economy in time, so that the practical branches would not be crowded in the end to the extent that now prevails.

Pending this solution of our problem, and as looking toward it, I am in favor of the plan now adopted at Yale and in a number of other university schools, in accordance with which the medical school requires a course of four years based upon a preliminary training of two years in college. It seems to me that the trend of events may readily convert this plan into the more uniform and logical system of a recognized professional course of six years, based upon the liberal education received from the high school or at least at the end of the high-school period of 18 years. If this amount of general education should seem to some to be too limited we must remember, in the first place, that other equally or more enlightened nations find it adequate, and in the second place, that professional training itself has a marked cultural influence that tends to make a man a student for life. For those who enter the professions, it is not necessary to condense all efforts toward culture within the short period of youth. In laying our plans for professional training mere length of time is not in itself a feature to be desired, and in passing from the period of general to the period of special training, as in passing from one train to another, the schedule ought to provide for a close connection.

There may be some advantage in loitering for a while among the pleasant paths of learning before taking the direct road to a profession; but the deci-

sion in this matter should be left to the individual's choice; it should not be obligatory in the system.

The sort of arrangement of the premedical part of the professional training that I am advocating is simply an extension of the ideal so well illustrated in the founding and successful development of the Sheffield Scientific School. The three year courses of this school are designed in part, in large part I imagine, "to prepare young men for pursuits that require special proficiency in the mathematical, physical and natural sciences." This professed intention expresses exactly the object that a premedical course seeks to attain. Among our eastern universities, Yale, it would seem to me, has the best opportunity in its existing organization to introduce plans of adaptation and co-ordination which might unite into a symmetrical whole the various parts of pre-professional and professional training. The university, the Sheffield Scientific School, the medical school and the hospital, all under such control as makes it possible to unite them to a common purpose, present a combination of facilities of greater extent and adaptability than is possessed by the other large universities. It is a singular fact, that our universities have not taken the lead heretofore in developing a rational system of medical education. The Johns Hopkins University, in establishing its medical department on a high plane, and in affiliating its medical school closely with its sister institution, the hospital, made a notable contribution, the beneficial influence of which has been generally recognized. But for the most part the ideals and theories that have controlled the evolution of our system of medical education during the past two decades have not come from the universities, as we might have expected, but from volunteer organizations among the physicians themselves, from the regulations of our State Boards and from special corporations, such as the Carnegie Foundation for the Advancement of Teaching. This apparent apathy of the universities toward a very important aspect of higher education is due presumably to the fact that the medical schools, with a few exceptions, were institutions over which the universities had no real control. This condition is now changed. Our best medical schools in the future will be integral parts of the universities and it is to be hoped and expected that this union will serve to focus the attention of trained educators upon the needs of the medical curriculum. In this coming movement I trust that Yale University will take the conspicuous part for which she is fitted by her great reputation and her special facilities.

YALE MEDICAL ALUMNI ASSOCIATION

OFFICERS FOR 1913-1914

President

HARRY B. FERRIS, 1890

Vice-Presidents

HENRY L. SWAIN, 1884

EDWARD M. McCABE, 1887

CHARLES G. CHILD, Jr., 1895

WILLIAM W. HERRICK, 1905

PAUL G. SHIPLEY, 1918

Secretary and Treasurer

MARVIN McR. SCARBROUGH, 1907

Chairman of Executive Committee

SEYMOUR L. SPIER, 1904

Centennial Committee

WILLIAM H. CARMALT, New Haven, *Chairman*

GOULD A. SHELTON, Shelton, 1869

T. MITCHELL PRUDDEN, New York, 1875

MAX MAILHOUSE, New Haven, 1878

EDWARD R. BALDWIN, Saranac Lake, 1890

CHARLES G. CHILD, Jr., New York, 1895

HERMAN C. PITTS, Providence, 1900

WESLEY G. VINCENT, New York, 1900

HAROLD S. ARNOLD, New Haven, 1903

OLIVER T. OSBORNE, New Haven, 1884

After the dinner of the Alumni Association, which followed in the evening in the University Dining Hall, the Chairman of the Centennial Committee introduced the following speakers:

Our Alumni Association

HARRY B. FERRIS

President of the Yale Medical Alumni Association.

The Connecticut State Medical Society and the Medical Institution of
Yale College (1810-1884)

OLIVER C. SMITH

President of the Connecticut State Medical Society.

A Quarter of a Century of Progress of the Yale Medical School

HERBERT E. SMITH

Dean of the Yale Medical School, 1885-1910.

The University and its Medical Department

ARTHUR T. HADLEY

President of Yale University.

The Future of the Yale Medical School

GEORGE BLUMER

Dean of the Yale Medical School.

**PRESIDENT HADLEY'S ANNOUNCEMENT AT THE DINNER
OF THE YALE MEDICAL ALUMNI ASSOCIATION.**

From the members of the Brady Family the University has received \$125,000 for the erection and equipment of a clinical and pathological laboratory to be known as the "Anthony N. Brady Memorial Laboratory."

The University has also been advised by the members of the Brady family of their determination to establish The "Anthony N. Brady Memorial Foundation" of \$500,000. Under the terms of this the income from the Foundation, \$25,000 a year, is to be given annually to the University for a term of ten years in order to enable the University to declare operative at this time the agreement with the General Hospital Society of Connecticut and conclude the alliance between the New Haven Hospital and the Yale Medical School. If within this ten-year period the University receives a total of \$2,000,000 for Medical School Endowment and Building Funds exclusive of gifts from the Brady family, the "Anthony N. Brady Memorial Foundation" of \$500,000 will become the absolute property of the University. Meanwhile, the University is enabled to take immediate advantage of the offer made to it by the General Hospital Society.

Towards the \$2,000,000 sought for the endowment needed to develop the Yale Medical School, independent of the sum required for the alliance with the Hospital, the University has received, as heretofore announced by the General Education Board, an offer from the Board of

\$500,000 conditioned on the remaining \$1,500,000 being secured by January 1, 1916, and upon the departments of medicine, surgery and pediatrics being placed on a full-time or university basis.

There has also been pledged and now announced for the first time: \$400,000 by unnamed donors, conditioned only upon the establishment of a department of Public Health in the Medical School, with the hope that the School may be a greater factor in improving public health conditions in Connecticut.

\$100,000 by Mr. Charles W. Harkness, of the Class 1888, Yale College, offered on conditions which can now be met.

\$100,000 by an unnamed "Alumnus of the University."

The total of these pledges towards endowment of the School is thus \$1,100,000 out of the \$2,000,000, it is desired to secure, independent of the sum required for the alliance with the Hospital. What remains to be secured at the earliest possible date is \$900,000 to complete the sum now required for the endowment of the School and absolutely needed in order to secure the largest conditional gifts.

Putting the matter in another way, the University has secured pledges for:

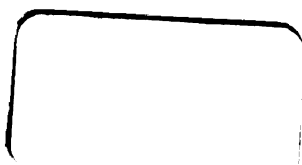
The erection and equipment of the laboratory.....	\$125,000
Endowment for Hospital Alliance.....	500,000
Endowment for Medical School	1,100,000

Total \$1,725,000

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